19970805.qrp v00_n809.qrs.970805

>From ???@??? Tue Aug 05 21:28:46 1997
Date: Tue, 5 Aug 1997 19:03:09 EDT
Subject: QRP-L digest 809
Message-Id: <97Aug5.190332edt.35020-63610+149@fidoii.cc.Lehigh.EDU>

QRP-L Digest 809

Topics covered in this issue include:

  1) [24314] Re: 1000 Miles/watt awards
     by Chris Cartwright <ccart@dns.vidtel.com>
  2) [24315] Tks for INFO on Drake List!
     by Steve Galchutt <n0tu@webaccess.net>
  3) [24316] SSB Sprint
     by mark.milburn@commonlink.com (Mark Milburn)
  4) [24317] 38S: The (nearly) complete guide to the mods. (LONG)
     by gsurrency@juno.com (Gary L L Surrency)
  5) [24318] Re: Post Office Limits pkgs/visit to 4
     by Chris Trask <ctrask@primenet.com>
  6) [24319] Re: SSB Contest-BAH!
     by NilsBull@aol.com
  7) [24320] Re: operating at QRPp level
     by Ed Loranger <we6w@qsl.net>
  8) [24321] camping & qrp
     by jdenison@morelr.com (JOEL DENISON)
  9) [24322] 10-10 ??
     by Bigbob97@aol.com
 10) [24323] Re: Post Office Limits pkgs/visit to 4
     by Chris Trask <ctrask@primenet.com>
 11) [24324] Re: 1000 Miles/watt awards
     by Jim W7LS <w7ls@brigadoon.com>
 12) [24325] Re: 5/8" HOLE PUNCH
     by dgf@netcom.com (David Feldman)
 13) [24326] Re: 1000 Miles/watt awards
     by Ed Loranger <we6w@qsl.net>
 14) [24327] 38S has got great ears! LONG
     by gsurrency@juno.com (Gary L L Surrency)
 15) [24328] Re: DX Spot Site has QRP Category too!
     by "Ron Polityka" <wb3aal@talon.net>
 16) [24329] Re:10-10, and new ham
     by "Steve, N2MNN" <n2mnn@openix.com>
 17) [24330] TT 515 Accessories ?
     by w8lrm@juno.com (Albert K. Rea)
 18) [24331] Roanoke VA ValleyFest '97
     by Paul Stroud <aa4xx@ipass.net>
 19) [24332] Re: 10 meters? Let's use CW!

by kc5moe@juno.com (John E Hutter)
20) [24333] Windom Not Best Choice for Multiband Antenna (long)
by ji3m@maxwell.com (James R. Duffey)
21) [24334] SWL report
by "Dean Marzocca" <n2tnn@ifu.net>
22) [24335] FS: MXM 40M xcvr
by N3BJ@aol.com
23) [24336] Re: 10-10 club?
by Hank Kohl K8DD <k8dd@contesting.com>
24) [24337] Re: 10-10 club?
by kt3a@juno.com
25) [24338] Re: QRP(p) via ALC
by "Steve & Anne Ray" <sbralr@worldnet.att.net>
26) [24339] Curses! Foiled Again!!
by Randy Hargenrader <randyh@harksystems.com>
27) [24340] Spartan Sprint
by "Ken Newman" <N2CQ@comten.com>
28) [24341] For sale Scout 555 complete......
by k8cv@juno.com (Walter D Amos)
29) [24342] Re: Curses! Foiled Again!
by Joe Gervais <vole@primenet.com>
30) [24343] HW-7 for sale
by Wayneb1103@aol.com
31) [24344] Re: More steel rails
by Raventhorne <jelder@ix.netcom.com>
32) [24345] Farnell / Newark
by Raventhorne <jelder@ix.netcom.com>
33) [24346] Re: 10-10 club?
by Bill Todd <bill@techline.com>
34) [24347] Re: 10-10 club?
by k5zty@juno.com (WILLIAM A STIETENROTH)
35) [24348] SP results
by k5zty@juno.com (WILLIAM A STIETENROTH)
36) [24349] club
by k4wz@juno.com (RON L TODD)
37) [24350] SWR Analyzer
by Marty <mlp@flash.net>
38) [24351] Re: Noise reduction w/ LM386
by K5BDZ@aol.com
39) [24352] Re: CUSHCRAFT verticals PROBLEM
by K5BDZ@aol.com
40) [24353] Re: SWR Analyzer
by "Phil, K6LS" <k6ls@qsl.net>
41) [24354] Re: Bridges?
by Glen Leinweber <leinwebe@mcmail.CIS.McMaster.CA>
42) [24355] FS TT-509
by w8lrm@juno.com (Albert K. Rea)
43) [24356] Re: CUSHCRAFT verticals PROBLEM

    by Jim <kw3u@warwick.net>
 44) [24357] UPS strike
    by Steven Weber <kd1jv@moose.ncia.net>
 45) [24358] Sprints from DM65sf, well, almost.
    by wa5whn@juno.com
 46) [24359] QRP Afield
    by n4js@amsat.org
 47) [24360] Sierra Power Mod Info
    by Jim Bennett <jbennett@ebmud.com>
 48) [24361] Re: SWR Analyzer
    by Chris Cartwright <ccart@dns.vidtel.com>
 49) [24362] QRP AField, Sept. 20th
    by wa5whn@juno.com
 50) [24363] 10-10 club
    by David Smith <qrpdave@ocsnet.net>
 51) [24364] Rainbow Tuner News from NJQRP
    by "Heron, George" <G.Heron@dialogic.com>
 52) [24365] Miles/watt Pixie2 GRAND FINALE
    by Ed Loranger <we6w@qsl.net>
 53) [24366] Aug. ScQRPion Meeting Notes
    by Joe Gervais <vole@primenet.com>
 54) [24367] Re: Broadband Amp
    by Zack Lau <zlau@arrl.org>
 55) [24368] Found it! (The thump)
    by n4js@amsat.org
 56) [24369] Re: Found it! (The thump)
    by Dana Myers K6JQ <myers@bigboy.West.Sun.COM>
 57) [24370] Re: Found it! (The thump)
    by "David Maliniak" <dmaliniak@penton.com>
 58) [24371] In defense of 10-X
    by rerobins@unccvm.uncc.edu (Rick Robinson)
 59) [24372] Re: QRP AField, Sept. 20th
    by Ken Lopez <kjlopez@earthlink.net>
 60) [24373] Re: SWR Analyzer
    by AA0QX <AA0QX@prodigy.net>
 61) [24374] Vacation Radio & the Smithsonian tour
    by NilsBull@aol.com
 62) [24375] Re: 10-10 club?
    by "G.R. Widmayer" <grwidma@edcen.ehhs.cmich.edu>
 63) [24376] altoids found
    by "chuck munce" <k0gjx@msn.com>
 64) [24377] Denver
    by Brad Mugleston <bmug@gwl.com>

Date: Mon, 4 Aug 1997 18:28:57 -0400 (EDT)
From: Chris Cartwright <ccart@dns.vidtel.com>

To: QRP Reflector <qrp-l@Lehigh.EDU>
Subject: [24314] Re: 1000 Miles/watt awards
Message-ID: <Pine.LNX.3.93.970804182239.1551B-100000@dns.vidtel.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Mon, 4 Aug 1997, Ed Loranger wrote:

> PIXIE Coupling Cap changed BACK To ORIGINAL .1 uF:
> Measured 2.52 Volts out of Pixie2 with xtal detector.
> Peak Power=(2.52/.707)^2/50=254 mW

Hey! That's about a 6db gain! It'll feel like a QRO rig now :) This might inspire me to dig that pile of parts (labeled Pixie II) out and turn it into a rig:) 72

-- Chris Cartwright,   Technical Engineer | ccart@vidtel.com   --
-- N3XRV   QRP WAS 17/9 (w/c) | ccart@erols.com   --
-- QRP-L #655 NORCAL #1891 QRP-ARCI #???? | http://dns.vidtel.com/~ccart --
-- WIMPS Q's=04 30M=04 17M=00 12M=00 STATES=03/00/00 DX=00/00/00 QSL's=00 --

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Date: Mon, 04 Aug 1997 14:25:00 -0600
From: Steve Galchutt <n0tu@webaccess.net>
To: "\"Low Power Amateur Radio Discussion\"" <qrp-l@Lehigh.EDU>
Subject: [24315] Tks for INFO on Drake List!
Message-ID: <33E63A9C.3B7F@webaccess.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Tks for all that responded Here's what I gathered:

Here is some information regarding the Drake mailing list. It is maintained by:
        thom.lacosta@fablotz.min.net
The following is the FAQ taken from the list's web home page:

The Drake Mailing List

Discussions concerning equipment manufactured by R. L. Drake Company

The DRAKE mailing list is designed to be a forum for discussions concerning equipment manufactured by the R. L. Drake Company. It is expected that members of the list will not only post messages concerning

Drake equipment that is for sale, but also equipment that they desire to obtain. Questions and answers concerning modifications are encouraged.

Participants are from around the world; please be polite, especially if someone makes what appears to be a mistake.

This list does NOT send your message back to you. If you don't get any replies, and you suspect you're not reaching the list...send email to: looptest@fablotz.min.net...the system will return your message as a confirmation that you're making it to the server.

Language: English

Requests for subscriptions to this list MUST be addressed to: listserv@fablotz.min.net

To SUBSCRIBE send email to:
listserv@fablotz.min.net

in the body of your message have:
subscribe drake

To UNSUBSCRIBE send email to:
listserv@fablotz.min.net

in the body of the message have:
unsubscribe drake

Posts to this list are addressed to:
DRAKE-L@fablotz.min.net

RULES FOR GATEWAY USE

DO NOT POST ENCODED FILES VIA THIS LIST. Your name will be removed from the list if you make this type of post.

Use common sense in quoting replies...just because your mailer quotes the entire message is NOT a reason for you to do it. Some folks are paying for their band width...they and my gateway equipment do not need to be beaten to death by over quotes.

Should the postmaster at this gateway receive excessive error messages from your provider about mailbox full, bad address, etc., your name will

be removed from the list. Once you've taken care of the problem, feel
free to subscribe again.

You may also add your personal information to the mailling list
subscriber database. To get help with the database, send email to:

membadd@fablotz.min.net
the message body should read
find: help

The subscriber database is also located at fablotz.min.net. To receive
help
with the database, send email to:

memfind@fablotz.min.net
the message body should read
find: help

The Drake Web Based Message Base can be accessed at
http://www.baltimorenews.com/technology/drakelist/

Thom LaCosta
k3hrn
thom@fablotz.min.net

The home page from which I obtained the FAQ is:

        http://www.min.net/~thom/drakelist/

.....................................Steve > n0tu . .
email:N0TU@webaccess.net
homepage <http://www.webaccess.net/~S&P>

Date: 03 Aug 1997 15:42:51 GMT
From: mark.milburn@commonlink.com (Mark Milburn)
To: qrp-l@Lehigh.EDU
Subject: [24316] SSB Sprint
Message-ID: <192319.83703@commonlink.com>

Just got home and turned on the rig...checked 40 and 20 and don't hear a
thing. Anybody taking part in this event?
72/Mark

KQ0I @ W0AK.#CIA.IA.USA.NOAM e-mail: mark.milburn@commonlink.com
ARRL;DMRAA;QRP-L #625;NORCAL #1829;ARS #139;NW QRP #418;QRP ARCI #9226
WIMPS Qs=017, 30m=17, 17m=00, 12m=00, States=11, Provinces =00, DX=01

Date: Mon, 4 Aug 1997 14:36:12 -0700
From: gsurrency@juno.com (Gary L L Surrency)
To: qrp-l@Lehigh.EDU
Subject: [24317] 38S: The (nearly) complete guide to the mods. (LONG)
Message-ID: <19970804.143702.9942.0.gsurrency@juno.com>

Ok, I've been asked for this by several people. So here it is. Hopefully this will motivated anyone who is still holding out building their 38S, doing mods, or those who have just bought one or will in the future. I've included all the mods I've done to mine, and I consistently get nice signal reports. Some hints are included to help you along the way to finishing your kit. Anyone who comes up with more info or suggestions is welcome to add or amend to what I've done. Enjoy!

These mods have been refined over a period of a few months, and have made my 38S darn fun to operate. These mods require very little trace cutting, and minimal parts added to the top or bottom of the PCB. The result looks really nice, and it is hard to detect the mods unless you look real closely.

Rule # 1. Use sockets. It ain't no fun desoldering an IC that was installed backwards, or one that has expired. I like the gold plated machine tooled type sockets. Circuit Specialists (1 800 528 1417) nearby in Mesa, AZ has them for 30 cents for an 8 pin socket to 75 cents for a 20 pin socket. Use whatever you prefer or can get locally.

Make sure to use plenty of light when building the kit, and use a proper PCB holder. Doug Hendricks showed a simple holder that Chuck Adams had, made from a 4 inch square piece of wood with two 2 x 4 inch pieces 1 inch think glued, nailed, or stapled to the outside edges of the 4 inch sq. piece. This makes a "U" shaped piece upon which you attach two wooden clothespins. The clothespins will hold a small PCB just right for soldering, and the whole thing is cheap and readily made. It also makes a great "third hand" for soldering connectors, etc. This is described in an upcoming issue of QRPp, so check it out. Kudos to Chuck and Doug for this great tip! And thanks to John Nystedt, KJ7YN at the last ScQRPions

meeting for passing these out to the members. Gracias!

If you are near-sighted, don't wear your glasses or contact lenses while building. You'll have much less eye strain when working up close if you don't wear corrective lenses. If you are not near-sighted or are far-sighted instead, use a magnifier lens. 63/37% tin/lead alloy solder is best, or the 62/36/2% tin/lead/silver solder from Radio Shack is real good too. These alloys have excellent wetting ability and a low melting point to reduce PCB and component damage. The supplied PCB from Norcal is of highest quality, and will survive all but the most ham-fisted builders! ;-)

Use a small 1/8" to 3/32" iron plated tip. I use a Solomon temperature controlled iron with digital temperature display. It was about $86 from Circuit Specialists.

Ok, enough of this. Onward to the mods!

RECEIVER MODS:

T1 has only 18 turns, instead of the 19 turns specified in the manual. You should have two peaks of trimmer TC1. There is a small "dot" on the type of cap my kits were furnished with, and this can be used to determine the position of the cap. I compress or expand the toroid windings until I get the "dot" to peak midway between the flattened side of the cap and the opposite side. This gives the most range of capacitance for tuning, and insures you T1 isn't too big or too small in inductance.

C4 is changed from .01uf to 10pf to better match the input impedance of U1, the NE602. This also maintains the loaded Q of T1 to allow best rejection of SW stations just outside of the 30m band. Some very strong SW stations may still bleed into the rig under exceptional propagation. A better input filter would be nice here during those time, but it's pretty good as is. It may be possible to use an even smaller value for C4 without sacrificing a little sensitivity, say a 5 pf or so. Might be worth a try. Otherwise, use an antenna tuner or carefully trimmed resonant antenna. I use a sloper dipole that was a little too short, and then match it with a LDG QRP autotuner.

It is essential to put a bypass cap from D6's cathode to ground. The reason is, the AC ground for this point is way across the PCB at C30, near the key input at wire pad # 9! Not good for stability, as D6 is supposed to ground C21 during transmit to accomplish the T/R offset. If you remove all the solder from the hole where D6's cathode goes, a small .1 or .01 uf monolythic axial cap will fit perfectly from the same hole as D6's cathode to a nearby PCB ground hole just above the silk-screened "1996" near the copyright symbol. You may need to flatten one or both

leads to get them to share the same hole. Better transmitter stability and reduced chirping and spurious output will be the net result. TC2 also behaves better.

You can use one of the .1 uf caps that would have gone at C30 or C41, near the LM7808 8 V regulator. This is because these are replaced with 22uf and 10uf tantalum dipped caps. I found this helped reduce or eliminate the infamous "thump" this rig has for many builders. The .1uf are just too small to keep the 8V regulator from responding to the large current pulses produced by the 74HC240 octal buffer during keying. You can get these caps from your local parts supplier or try an old PC add-on card. You can find these caps on many of them for practically nothing. C30 needs at least a 16 volt rating, but C41 can be 10 volts if that is what you find. Both caps could be 22 uf if that is what you have, I only found a single 22 uf for my kit. Use tantalums though, as they have *much* less series inductance, and are best for power lead decoupling.

If you have a scope, watch the DC level of the 12v in and 8v out of VR1. Any large pulses during keying is reason for alarm, so if your 7808 is crummy, try another one or examine the caps just mentioned above. Pulses from the 8v regulator have been reported by Paul Harden, NA5N and others (including me!), so watch out for this potential problem. Keying noise on the 8v supply is hard to clean up in the other areas of the circuit, so it is best to nip it at the source. ;-)

Similarly, the 8v bus as it is applied to U5 and TR1 is rather poorly decoupled. If you look at the 8v trace as it extends from the output of the 7808, there is a long PCB trace with no additional decoupling on it. I placed a 4.7uf tantalum on the tops of R25 and R26 on the ends nearest TC2. The positive lead goes to R25, or just below the unused hole next to the "TC2" silk screen. Additional stability and reduction of "thumping" results from decoupling TR1 and U5's voltage source.

On the bottom of the PCB, stretch a .1uf axial monolythic cap across from pin 8 to pin 4. I found this necessary on my 38S to prevent an audio oscillation that was occurring during keying from "ringing" of the 8v source to the NE5532. It sounded just like the sidetone! U5 has such high gain, it will "hear" and amplify anything coming in on its supply line. More thumps silenced. Ron, KA1KCU also noticed this on his rig.

As long as I'm on the subject of U5, let's talk about the audio output level. I changed R24 from 47 ohms to 4.7 ohms. This increases the output level quite a bit. The 4.7 ohm resistor was salvaged from an old computer power supply. You could use a jumper here, but the resistor fits and looks better! I used an insulated stereo 3.5mm headphone jack, by making the hole large enough to pass the shoulder of the R/S jack thru the back chassis panel. A fiber washer finished off with a metal one keeps the knurled nut of the jack from shorting out against the aluminum. I

mentioned in another posting that fiber washers can be salvaged from old binding post hardware if you are willing to enlarged the hole.

With both channels of the headphones in series, the audio level is adequate. I have tried several headphones, from Sony MDR-25 to R/S Nova 34 units, all with good results. The 25-35 ohm per channel impedance in series seems to work well with the drive ability of the NE5532. Walkman type amplified speakers will also provide fair audio levels if you want to let others listen, but the headphones are the way to go.

Note: Some NE5532's are better than others! Try several if you have them. I like Signetics manufactured chips better than the JRC brand supplied with the kit. It just seems to have better Power Supply Rejection Ratio (PSSR) (less thumping) A TL082 J-FET input dual op-amp was even quieter, but it tends to overload and distort somewhat on the strongest signals. Probably it lacks sufficient output current capacity. My Signetics NE5532 was scarfed from an old computer monitor.

While on the subject of thumping (!), I noticed an extreme tendency for PCB contamination to increase the thumping. Some of the T/R traces pass very near the high-gain audio circuitry, and any crud on the PCB conducts pulses into the audio chain. Clean the bottom *and* top of the board thoroughly in this area, as well as the rest of the board. A little bit of leakage here is impossible to silence, so clean it well with denatured alcohol and/or Formula 409 or equivalent and rinse it with water and dry thoroughly. A finger placed across this area will dramatically increase the T/R thumping.

C15 is reduced from 25uf to 1uf to roll off the low frequency response and reduce the coupling of low frequency noise, pulses, thumps, etc. I used a 1uf tantalum here.

For the following step and the PIN diode mod, you *must* install the TiCK keyer mod to free up the inverters from the sidetone circuit. .

If your 38S is still making too much popping during keying, there is a final "thump" cure. It incorporates a FET switch to mute the audio line between U2 and U5. If you have a rig that uses FET muting, try its circuit here. Cut the trace from U2 pin 11 to C14, and solder a 2N3819 R/S FET across the cut, with the flat side of the FET toward the PCB and near U2's pins 12-14. The outer leads solder to the PCB just cut. If you use a different FET, just be sure to check the lead identification before soldering it in. An MPF102 would work just as well.

Next, solder a 1N4148 or 1N914 diode with anode to FET center lead (gate), cathode to U4 pin 5. Also solder a 1M 1/4 or 1/8 watt resistor across the diode just installed above. Solder a .1 mono cap from FET center lead (gate) to ground via hole adjacent to U2, pin 9. Use very

short leads here. The FET, diode, and resistor are all mounted with minimum lead lengths tightly against the PCB. All of the components except the FET are installed in-line with each other when viewed from the bottom of the PCB. These steps using the FET got rid of all but a tiny thump that must be coming into the audio chain from some other source than the CD4066 chip.

Since I use a keyboard with its own sidetone, I didn't need a sidetone for the straight key jack wired to pads 9 (keying) and 10 (ground). The TiCK provides a sidetone when using paddles, and I found a 1 meg resistor for R17 gave me a soft sidetone volume that was just right. The programming tones from the TiCK are easily heard. Don't forget to cut the trace near U4 pins 4&5 when you do the TiCK mod. This isolates the inverter output of the 74HC240 from the TiCK's sidetone output. I like to use a small jeweler's screwdriver as a chisel to cut traces. Make a shallow cut from both sides, no wider than the width of the trace to be cut. This works better for me than an Exacto knife or similar tool.

Note that the TiCK keyer can be used in straight key (SK) mode, so only one jack could be used for both paddles and straight key or keyboard, and this will allow a sidetone for either type of keyer. If you do this, note that *either* the dot *or* dash paddle will key the rig in SK mode, so you will have to use a stereo plug with only the tip or ring wired to the SK or keyer's output, with the sleeve wired to ground. Otherwise the rig will key continuously when a mono plug is inserted into the stereo paddle jack. Alternatively, you could just put the plug half-way in the jack.

TRANSMITTER MODS:

To greatly reduce transmitter spurious output and improve spectral purity, replace *both* C25 and C26 with 330 pf disc or silver mica caps. The output of my rig was greatly improved by these two mods, and TC2 becomes a lot less touchy to tune. L2 is at 19 turns, spacing adjusted so that TC2 in its mid-range when cleanest output is attained. I also found that it seems to be best to adjust TC2 for the lowest frequency possible when at the extreme lowest frequency end of the tuning range. Some frequency pulling is apparent, and the chirp / drift at the low end is lessened this way on mine.

Watch out for VHF parasitics when tuning TC2, and monitor Q2 to be sure it doesn't get fried while diddling the trimmer. Q2 *must* be well heatsinked to save it from leaking it's smoke during these adjustments, although when it is properly aligned there isn't much heat produced. Current draw is 27 ma during receive, and 800 to 950 ma on transmit depending on output level. I never lost my original IRF510 from R/S, but I have a spare just in case. ;-)

It may be possible to further reduce the value of C25, lowering the drive

into the 74HC240 and reducing loading of TR1 and the resulting current draw and frequency pulling of the lower frequency settings. I suspect there is a threshold value for C25, below which drive and stability is reduced, and above which the output spectrum suffers. Some additional experimentation here may be valuable.

Onward to the 5 watt mod. I kept the ferrite bead on R104, the 10 ohm resistor in series with Q2's gate. R101 and C101 are not used. C101 is replaced with a wire jumper. This method of driving Q2 results in good output, no current drain from bias on Q2 during receive, and great transmit efficiency.

When adding the 5 watt mod, the PIN diode isolation needs to be improved to reduce overloading U1's input. Here is an excerpt from Mike Gipe's posting on this mod:

<<<<From Mike Gipe>>>>

This modification puts a reverse bias of 8 volts on the PIN diodes when in
transmit mode, improving the switch isolation.

1. Make sure that you have removed D8, R15, R16, and C31. Also make sure that you have cut the trace between U4 pin 3 and R17. This is part of the
TiCK keyer mod.

2. Now, put a wire jumper where D8 used to be. You did this anyway to keep
U4 from floating.

3. There is a trace on the PC board, solder side, which connects R1, R2, and R14 to 8 volts. Cut it between R2 and R14. This leaves R14 connected to 8 volts, and R1 and R2 connected together but nowhere else.

4. Take a short piece of insulated wire (30 ga. wirewrap wire works well)
and connect the R1/R2 node to U4 pin 5. The empty hole where R16 used to be is a good place to connect to U4 pin 5. Route this wire along the solder side of the board near the path taken by the trace that you cut.

5. Check your work, then smile. You're done.

<<<<Mike K1MG>>>>

Thanks Mike!

For the output filter, I had best results with the following values: C505

(on the schematic, the board is marked C501) is 560pf. C25 is 1000 pf, C26 is 560 pf. All caps are silver mica (used by me) or polystyrene for best efficiency. I used 11 turns for L3 and 12 turns for L4. By compressing or expanding the turns on these two toroids, I can get between 3 watts and almost 8 watts output. L4's windings are half-compresses at the top of the core, and L3's turns are spread evenly around the entire core. Experiment and arrive at the output level and spectral purity that is right for you and your rig.

CHASSIS IDEAS:

I mounted my 38S PCB right against the back of a nice aluminum cabinet from Circuit Specialists (catalog no. LA-4, $5.30). There is nearly 1/2 inch of clearance on the sides of the PCB to the case, and 3/4" between the front panel and the edge of the 38S PCB. This allows the heat sink tabs of Q2 and VR1 to be placed against the back panel for heat sinking. I use Thermo Pads (also salvaged from old computer power supplies!) for insulating the metal tabs, and 4-40 nylon screws that preclude the need for shoulder washers as required with metal screws. Trial fit the PCB in the case you use, and shorten the leads of Q2 and VR1 slightly to allow attachment to the rear panel without excessive lead length. Tack solder their leads in place, then remove the board and solder the leads well. A slight bend in the leads will help prevent failure due to flexing of the thin rear panel.

Center the PCB with the back edge held against the inside rear panel, and mark the holes. Drill four 1/8" holes after center punching the locations. To mount the PCB in the case, I used 1/4" long 4-40 machine screws installed from the bottom, and tightened to 4-40 nuts on the inside. On top of these, I used some salvaged 4-40 screw locks from old computer DB-9 or DB-25 connectors. This is because the female portion of the computer hardware is too short to allow the 1/4" machine screws to tighten without bottoming. The 4-40 nut takes up this depth perfectly, and the result is the PCB is almost level with the bent-up edge of the case sides where the cover mounts. Also, the rubber feet screws of the case are cleared with this hardware arrangement.

4-40 common nuts will secure all the male threads that pass thru the PCB from the screw locks, except it is a little close at C29 near the antenna hole. I used a miniature 4-40 nut here also salvaged from a computer connector. These are getting a little hard to find now that most of today's connectors are nut-free, even if computer nuts are still plentiful! ;-)

Threaded 4-40 spacers would work as well, I just had this hardware on hand.

I mounted all the connectors in a line across the rear panel, except for

the headphone jack which went in the lower corner below the paddle and SK jacks.
Resist the urge to use anything but a quality, silver plated 4-hole BNC jack for the antenna connector. Anything less is pure sacrilege! I mounted mine directly above the mounting hole near C29 3/4" from the edge of the chassis.

And please don't use those cheap R/S SPST buttons for the TiCK mode switch! You won't like it! Get the best quality SPST switch you can find, and pat yourself on the back when you install it. I got some decent ones with metal sleeves under the button for a better feel and less "bounce". Quality C/K or Mountain switches are nice for this.

The front panel has the RF 1K pot mounted on the lower left, the main tuning 100K pot centered, and the 10K pot on the lower right. All of these pots are available from Circuit Specialists for $0.85 each, or from Mouser, etc. In fact, the ones I got from C/S were marked Mouser! I used as large a knob as possible for the tuning pot, and smaller ones for the RIT and RF gain. A sub-miniature SPDT toggle completes the RIT, and is mounted just above the RIT pot on my rig. The bottom switch lug connects to the 2nd and 3rd terminal of the RIT pot just below it. The center switch lead goes to pad # 15, and the top switch lead goes to pad # 14. The 1st terminal of the RIT pot (left, viewed from the front panel) goes to the same terminal of the tuning pot as pad # 17. Use the shortest leads possible for a neat connection.

I put a 27K resistor from wire pad # 17 to the ground foil near X3 to make the tuning more linear. A 5.6 uH choke for L1 allows tuning from 10.103 to 10.120 on my rig. There is some slight chirp and drift when tuned to the lower end of the band I have yet to resolve, but above 10.106 it is free of this. Also, at the low end of the tuning range, the receive and transmit frequencies differ enough that the RIT needs to be turned to approx. the 3 o'clock position to stay on freq. with the other station.

Not much RIT range is had at the high frequency end of the tuning pot, since the 1N4004 is pretty much "squeezed" to the minimum capacitance it can achieve. Note some 1N4004's are "better" than others. Try several to arrive at the best tuning range and least chirp at the low frequency end. Some have dispensed with the RIT control, or used saturated transistor switches to quell the chirp. I'll leave that option up to you.

SUMMARY:

There are some shortcomings to a simple rig such as this one. More image rejection would be nice, but a two pole bandpass filter would also introduce some weak signal loss and additional complexity and alignment. The RIT range is very little at the high end of the band, and at the low

end there is some frequency drift and slight chirp. I noticed that touching the PA output filter or TC2 during transmit seemed to worsen this effect. Some further investigation is warranted here.

The keyed waveform is very hard, with near-vertical rise/fall times. This might not be possible to correct, as it is probably due to the digital nature of the 74HC240 chip. But it *will* key at high speeds without loss of character lengths, and seems to punch thru well when propagation is marginal.

If some of the mods are not done, the 74HC240 gets fairly unstable, and will emit "light saber" noises, and possibly self-destruct. DO replace D8 with a jumper, and perform the 5 watt PA mod. The rig just behaves better. The TiCK is essential to the overall performance of the radio, and you'll be much happier with it than without it. I'm going to get the TiCK-2 with its memory feature. It should be a lot of fun, especially when you have to call CQ a bunch on a poor band or late at night. ;-)

On the flip side, the rig has a lot of performance for a simple design. I find I have to reduce the RF gain frequently to reduce the headphone volume. And I can hear weak signals some of my other rigs can't hear! The transmitter seems to loaf along at 7-8 watts if you want it, and produces little heat with very little current demand. The finished rig can be as pretty as you want it, and it won't cost you a fortune to finish. It is a complete radio with the keyer installed. The QSK is very good and fast, especially when "Mr.Thump" has been evicted! You'll be able to hear BK from the other hams easily.

Mechanical stability is excellent! It's a great mobile or trail-friendly radio! Surprising performance and small weight for an inexpensive kit. The quality PCB from Norcal, the excellent manual and parts quality will make you not regret spending $25. And the knowledge you'll gain by building, debugging, and modifying can't be measured in dollars. A lot can be learned and improved upon by just tinkering with this great kit. Norcal, Ori, and a lot of others have helped to make this project more fun than I've had in years. Thanks everyone!

72,

AB7MY
Gary Surrency
Chandler, AZ (Near Phoenix), QRP-L #571, AZ ScQRPions

Date: Mon, 4 Aug 1997 13:52:46 -0700 (MST)
From: Chris Trask <ctrask@primenet.com>

To: Ed Tanton <n4xy@bellsouth.net>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [24318] Re: Post Office Limits pkgs/visit to 4
Message-ID: <Pine.BSI.3.96.970804134859.15494B-100000@usr07.primenet.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Mon, 4 Aug 1997, Ed Tanton wrote:

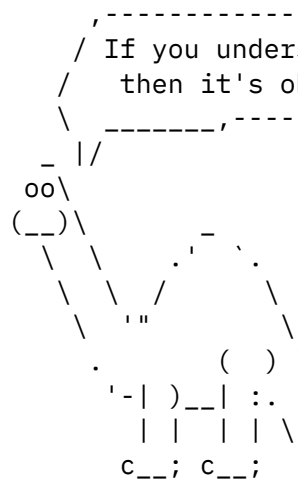
> Hello All... I just heard on CNN that the Postal Service is limiting the
> number of packages you can send ** per visit ** to 4. Therefore, take a
> friend or relative with you if you have more than that to ship. Gives you
> somebody to talk to while standing in that long line too!!!

I heard that on NPR as well. Even better, invite ALL of the neighbourhood kids (and perhaps those of your employees) out for an ice cream cone.

Most everyone is going to find out that, for packages of less than 10 pounds, the Post Office is a tremendous bargain. And that makes everyone happy :{)

Regards,

Chris



Circuit Design for the
RF Impaired

Chris Trask / N7ZWY
Principal Engineer
ATG Design Services
P.O. Box 25240
Tempe, Arizona 85285-5240

Technical Editor,
QRP Quarterly
QRP ARCI 9464

Email: ctrask@primenet.com

Graphics by Loek Frederiks

Date: Mon, 4 Aug 1997 18:10:36 -0400 (EDT)
From: NilsBull@aol.com
To: n4js@amsat.org, qrp-l@Lehigh.EDU
Subject: [24319] Re: SSB Contest-BAH!
Message-ID: <970804181014_207710894@emout01.mail.aol.com>

In a message dated 97-08-03 17:23:51 EDT, n4js@amsat.org writes: "Think I'll stick to CW. This was my first venture into SSB for a long time, and probably the last for a while."

Ah, c'mon, John. It ain't that bad. Sometimes there are really rational people on SSB. That's why you won't hear me on there that often, even if I can go from QRP CW to QRP SSB (or even QRPo CW to QRPo SSB . . . or QROp SSB . . . or whatever).

Back in the good old days (which were for me the 70s and real early 80s), you could get on SSB without a Henry 15K modified for broadcast service and have nice chats with folks. Like the guy in Argentina who set me straight about how an economy based on the sale of automobiles and petroleum fuel products (as the USA was then [and may still be, all those Nissans to the contrary &c] in one part of the world feeds folks in another. Or the recipe Cindy and I got for arroz con habichuelas from a Puerto Rican ham whose wife just happened to be by the shack.

Nowadays, it's damn near criminal some of the stuff you hear. And to think that WB4REN got busted three or four times for saying four-letter words on the OVTN frequency (3968 kHz) back around '75 or '76. What he said then is garden-variety fare nowadays.

Why, when I was younger, we . . . day-glow bikinis . . . fish . . . lizard boys from Venus . . .

Which means, if you're gonna grouse about the SSB stuff you hear, get on the air with SSB and contribute something. You will, of course, have to start your own discussion. Which for me is easy, since I can always talk to myself. And who knows? You might even start a trend. No, not the trend of talking to yourself. The trend of having rational, human conversations with other folks elsewhere who wanna do the same. Start a tend or talk. Whatever.

And it might even help Dave Benson sell more of those radios (which, I swear, I am gonna have to buy, just to cheese off my "15kW-is-only-the-beginning-of QRO" buds down on 75. And come to think of it, they're pretty rational too. . . for retired hippies, I mean. . .don't you agree Nils? . . .sure, whatever you say, Nils. Hand me that cheese otter, will you? . . . .The one in the tutu? . . . No, the one holding the microphone dressed up like a rubber chicken. . . .Yeah, that one. . .

I can hear the blower noise already!

73
Nils
WB8IJN &c
 . . . which reminds me: I first met WB4REN one late night radio session when I turned on my Argonaut and tested talking to a bunch of loonies (and they were loonies then) who thought that 100 W was QRP . . . Hmmmm . . .

Date: Mon, 04 Aug 1997 14:27:12 -0700
From: Ed Loranger <we6w@qsl.net>
To: ke3nv@erols.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [24320] Re: operating at QRPp level
Message-ID: <33E64930.767E@qsl.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Thanks for the report Scott.

I too have called, even just last night spent 2 solid
hours on the Pixie2 with my just completed RIT mod.

Did get AE4?? (Dont have the call in front of me), who
sent me QRZ? and PSE Try agn etc.... But just too much
QRN/QRM.

Gotta address the Antenna System. (Radiator and Trans. line.)

So there's more work to be done, fer sure, in milliwatting
to be successful.

And I'm looking forward to QSO's below 1 watt soon!

-Ed Loranger es sterba curtain on the way...

--
72/73 de we6w qrp es cw ONLY (From non-ham to extra in one day!)
HW-8;OHR-100, Pixie2, Johnson Viking II w/VFO.
QRP-L#1068/Norcal#2227/ARS#275/ARCI#9397 grid CM88ok
mailto:we6w@qsl.net http://www.qsl.net/we6w

Date: Mon, 4 Aug 1997 15:22:42 -0500 (CDT)
From: jdenison@morelr.com (JOEL DENISON)
To: qrp-l@Lehigh.EDU
Subject: [24321] camping & qrp
Message-ID: <199708042022.PAA05675@m20.morelr.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

High everybody:

I have been off the computer but not off the cw. I've gone camping a couple of times and found that if I use my truck body for gnd and throw a wire to the top of some tree I tend to work a lot of people. A few days back I caught thirty meters open and all of europe was s9 or better on receive.

I also checked into a few cw nets and one ssb net and made a few ssb qso's. This last trip I put up an inverted vee, 45 ft. on each side and the center up over 50ft and worked all I wanted till the band went dead. (but I got to see the nortern lights!)

I'm camping about 30 miles nw of Rangely Maine at the black brook cove camp gnd and will be back there next tuesday, that's a week from tomorrow. I operate near 7.040 + - ten khz. call is WA5CVM/1 dON't let the 5 fool you. I am living in Farmington Maine and qrp is all I have chosen to use for power.

Hope to work a few of you next week
72 Joel wa5cvm

God Bless
Joel

WA5CVM
Joel Denison Gentle Lady (RC Sail Plane)(049 engine - high start)
81 High street 40 mtr dipole up 40ft
Farmington, Maine 04938 QRP ARCI 4066 NEW ENGLAND QRP 476 QRP-L 765
jdenison@morelr.com AK/QRP 109

Date: Mon, 4 Aug 1997 18:02:47 -0400 (EDT)
From: Bigbob97@aol.com
To: QRP-L@Lehigh.EDU
Subject: [24322] 10-10 ??
Message-ID: <970804180152_-87505229@emout04.mail.aol.com>

When I was a novice we had a saying, "Too much SSB rots the brain." So, all I have to say about this 10-10 stuff is if you were on CW it wouldn't have happened. Of course, I get my share of grief on 3810 or thereabouts - I should heed my own advice! 73,
Bob WB2DHK

Date: Mon, 4 Aug 1997 15:18:29 -0700 (MST)
From: Chris Trask <ctrask@primenet.com>
To: Ed Tanton <n4xy@bellsouth.net>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [24323] Re: Post Office Limits pkgs/visit to 4
Message-ID: <Pine.BSI.3.96.970804151605.2786A-100000@usr10.primenet.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Mon, 4 Aug 1997, Ed Tanton wrote:

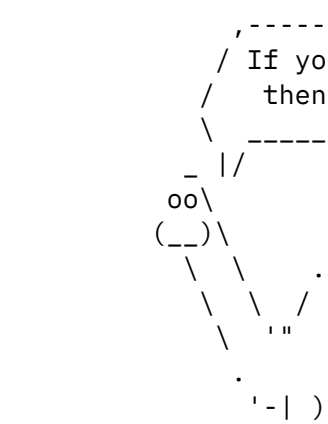
> Absolutely! I have found that to be completely true... also, for shipping
> things you want to keep track of (I'm buying a 75A4, and just sent the 1st
> half [$600]) you can use EXPRESS MAIL, and for $11 get it there the next
> day, and have a written record of its path and receipt... easy and quick.
>

    You just wait and see what happens when the rest of the country rediscovers the post office. They'll have to employ MORE clerks and sorters.

    And I'm taking the postal exam in 2.5 weeks. Yes there is a God! Thank you, Teamsters!

Regards,

Chris



Circuit Design for the
RF Impaired

Chris Trask / N7ZWY
Principal Engineer
ATG Design Services
P.O. Box 25240
Tempe, Arizona 85285-5240

Technical Editor,
QRP Quarterly
QRP ARCI 9464

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        | |  | | \  '.
       c__; c__;  '-..'>.__      Email:  ctrask@primenet.com
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Graphics by Loek Frederiks

Date: Mon, 4 Aug 1997 14:02:37 -0700 (PDT)
From: Jim W7LS <w7ls@brigadoon.com>
To: Ed Loranger <we6w@qsl.net>
Cc: qrp-l@Lehigh.EDU
Subject: [24324] Re: 1000 Miles/watt awards
Message-ID: <199708042102.OAA07482@siskiyou.brigadoon.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Oopsie, Ed..... Check your formula again for power. :-)

Comments below in the text...

At 01:18 PM 8/4/97 -0700, you wrote:
>Hi Homebrew and QRP-L folks, I'm done determining
>the ouptut power of my Pixie2. Many thanks to all
>who sent excellent suggestions via email. I thank
>each and every one for the comments. I have no o-scope
>so am stuck with the voltage measurement. Now that I've
>researched the internal design of the 8471A Detector, I
>realize the measurements were BOGUS. However, the output
>power of the pixie2 was still low. Read on.....
>
>The detector is the HP8471A (Correct Part Number), which
>incorporates a 'Point Contact diode'.
>
>Here's what I found out last night.
>
>1. The 8471A has an internal 50 ohm load. So I didn't
>need to load the pixie2.
>
>2. I had used a 100 pF cap on the collector of Q2 instead
>of the .1uF originally designed. Big mistake -- That's where
>the power loss was!!!!!!!!
>
>So Here's What I got:
>

>Original transmission was at 69.7 mW (100 pF coupling cap)
>Measured 1.32 Volts out of Pixie2 with xtal detector.
>Peak Power=(1.32/.707)^2/50=69.7 mW
>
>So 637 Miles/.0697=9139.17 Miles/Watt (I really Believe this)
>
>PIXIE Coupling Cap changed BACK To ORIGINAL .1 uF:
>(Broadcast noise Bad again)
>Measured 2.52 Volts out of Pixie2 with xtal detector.
>Peak Power=(2.52/.707)^2/50=254 mW

Power formula should be as follows:

Peak power is Peak TIMES .707, then squared, then divided by 50 ohms.

So, (2.52*.707)^2/50=63.5 mW (again, by shear luck!!)

Now, the miles per watt should be 637/.064=9,953 miles per watt...

Hey, knock the cap down a bit more and let's go the the 10K award!!!!

>
>This all on 7.04 MHz Xtal.
>
>On 3.579 and 3.6864 I got 2.85 V or 324 mW.
>
>
>Thanks one and all.
>-Ed Loranger
>--
>72/73 de we6w qrp es cw ONLY (From non-ham to extra in one day!)
>HW-8;OHR-100, Pixie2, Johnson Viking II w/VFO.
>QRP-L#1068/Norcal#2227/ARS#275/ARCI#9397 grid CM88ok
>mailto:we6w@qsl.net http://www.qsl.net/we6w
>
>

Date: Mon, 4 Aug 1997 14:35:09 -0700
From: dgf@netcom.com (David Feldman)
To: qrp-l@Lehigh.EDU
Subject: [24325] Re: 5/8" HOLE PUNCH
Message-ID: <199708042135.OAA23376@netcom17.netcom.com>

You can also go to the FARNELL (previously known as newark) catalog and they have a series of punches made by a british manufacturer Q-MAX- circular in various sizes 3/8" up... and a 1" square model. They aren't expensive (under $10 I think for the smaller circular sizes), are reasonable quality (not greenleee, but if you keep them well lubricated it's fine), and they are driven by a allen hex driver of some appropriate size rather than a square/adjustable wrench.

73 Dave WB0GAZ dgf@netcom.com

Date: Mon, 04 Aug 1997 14:48:26 -0700
From: Ed Loranger <we6w@qsl.net>
To: Jim W7LS <w7ls@brigadoon.com>
Cc: qrp-l@Lehigh.EDU
Subject: [24326] Re: 1000 Miles/watt awards
Message-ID: <33E64E2A.57A5@qsl.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Jim W7LS wrote:
>
> Oopsie, Ed..... Check your formula again for power. :-)
>
> Comments below in the text...
<snip>
> >Original transmission was at 69.7 mW (100 pF coupling cap)
> >Measured 1.32 Volts out of Pixie2 with xtal detector.
> >Peak Power=(1.32/.707)^2/50=69.7 mW
> >
> >So 637 Miles/.0697=9139.17 Miles/Watt (I really Believe this)
> >
> >PIXIE Coupling Cap changed BACK To ORIGINAL .1 uF:
> >(Broadcast noise Bad again)
> >Measured 2.52 Volts out of Pixie2 with xtal detector.
> >Peak Power=(2.52/.707)^2/50=254 mW
>
> Power formula should be as follows:
>
> Peak power is Peak TIMES .707, then squared, then divided by 50 ohms.
>
> So, (2.52*.707)^2/50=63.5 mW (again, by shear luck!!)
>

Ahhh, but the QSO was at (1.32*.707)^2/50=17.42 mW

> Now, the miles per watt should be 637/.064=9,953 miles per watt...
So 637/.01742=36567 miles/watt.
>
> Hey, knock the cap down a bit more and let's go the the 10K award!!!!
>
Sounds Like fun! how about 100K ol' buddy.
> >

P.S. I'm going to put a 10 dB attenuator before the xtal
detector in case it is being overdriven. Hope I can find
a 10 or 20 dB atten lying around. Then measure again.

-Ed (I just can't believe it's that low), Loranger

--
72/73 de we6w qrp es cw ONLY (From non-ham to extra in one day!)
HW-8;OHR-100, Pixie2, Johnson Viking II w/VFO.
QRP-L#1068/Norcal#2227/ARS#275/ARCI#9397 grid CM88ok
mailto:we6w@qsl.net http://www.qsl.net/we6w

Date: Mon, 4 Aug 1997 14:37:00 -0700
From: gsurrency@juno.com (Gary L L Surrency)
To: qrp-l@Lehigh.EDU
Subject: [24327] 38S has got great ears! LONG
Message-ID: <19970804.143702.9942.1.gsurrency@juno.com>

Yes!!!! It does have a sensitive receiver! I worked AL7JF last night on
10.105 Mhz with 5w and my 25 ft (low) sloper about 0543Z. And it's
pointing to the SW! He was calling CQ with no takers, and was pretty
weak. I thought, "What the heck, I'll give him a call". He answered me,
and we had a pretty good QSO with 4 or 5 exchanges.

I am using the LDG autotuner, manually tweaked with the reflected power
down to less than 5mw on the WM-1, so most of the power is making it ot
the antenna.

Now I could just hear him, and the QSB was taking his sig up and down so
that I first copied his name as Mary, but he corrected me and said it was
Marty. :-)

I figured he was running more power than I was, and that I could hear him
but he couldn't hear my pip squeak signal. Au contraire, mon frere. He
has a great set of ears, too! If he isn't a QRPer, he should be!

Now, get this: I tried to listen to him on my ARK30, since I was getting a slight amount of BCI bleed-thru into the 38S's single pole rcvr bandpass filter. You see, the ARK30 has the super BCI killer mod installed and isn't afflicted with *any* out-of-band SW crud. But I couldn't copy him on the ARK30 worth a hoot! The 38S, simple as it is, just picked his signal out better! Must be that low noise floor again. I had this same thing happen a week ago with a station in St.Kitts, Netherlands Antilles. (By the way, I've been there during my honeymoon, and it's a beautiful island!)

Now the question I have is: If I add another pole to the 38S receiver's input bandpass filter, will I lose enough sensitivity that the rig can't hear these weak guys? I'll have to try it.

And yes, I have changed C4 from its original .01uf to 10pf to match the NE602's input impedance and minimize loading of the simple one pole bandpass filter. The BCI rejection did improve from that, but on occasion with the propagation just right, the BCI makes the rig pretty useless unless I reduce the RF gain, and then there goes the sensitivity! :-(

Later last night I had another QSO with K7GT in Pleasanton, CA and he gave me accolades on the great sounding signal. At the time, we were the only signals heard on the band. He gave me an S5 S-meter report, and a honest RST of 559 to 459 w/QSB.

Next project here is to compile all the mods to my 38S as Doug KI6DS asked, and I'll post 'em to the list. It should be pretty soon, as I have another 38S unbuilt so I can examine it without disassembling my working 38S.

So if you have reservations on building or operating this lil bugger; don't! I'm still smiling from the FB QSO's last night! It's a neat little rig! Thanks to Ori, and a host of others who have supplied mods to this radio. I'm still trying for my 2-way 38S QSO.

72, and look for my mod list soon, real soon.

AB7MY
Gary Surrency
Chandler, AZ (Near Phoenix), QRP-L #571, AZ ScQRPions

Date: Mon, 4 Aug 1997 16:35:11 -0400
From: "Ron Polityka" <wb3aal@talon.net>
To: "QRP-L" <qrp-l@Lehigh.EDU>

Subject: [24328] Re: DX Spot Site has QRP Category too!
Message-ID: <199708042040.QAA07696@pelican.talon.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Joe is correct, but you have to remember one thing. Who ever is making the spot on OH2BUA or any other cluster have to post the call with a /QRP behind the call. This is the only way it will pop up in this category.

73 & Good DXing
Ron de WB3AAL

wb3aal@talon.net

OWL's Radio Club

    QRP # 5318   PA QSO Party 1996 Small Club Gavel
G-QRP # 3031   PA QSO Party 1996 Active Member, High
  10-10 # 13173   Average Aggregate Award
QRP-L # 1099

> From: Joe Gervais <vole@primenet.com>
> Subject: DX Spot Site has QRP Category too!
> Date: Sunday, August 03, 1997 9:42 PM

> Just ran across the OH2BUA Webcluster (a great DX spot site at
> <http://www.clinet.fi/~jukka/webcluster.html>) and noticed they
> even have a special selection for checking QRP DX spots. Handy!
> I think I like this OH2BUA critter. :)

Date: Mon, 4 Aug 1997 19:32:13 -0400
From: "Steve, N2MNN" <n2mnn@openix.com>
To: QRP-L@Lehigh.EDU
Subject: [24329] Re:10-10, and new ham
Message-ID: <199708042332.TAA04034@openix.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

I'm so proud of my 11 year old son, John. He got his Novice on Friday!(KC2CFZ). He is very quiet and shy. Saturday, he wanted to make his first QSO. I was set on 40 M CW, but tried 10 SSB just in case. He

insisted on making all contacts unassisted. He contacted 6 10-10'ers in 4 states. Everyone of them knew John was very young and needed some assistance from them to complete the contact. They were all very patient, and welcomed John to the hobby, and 10 meters. They all said it didn't matter if you didn't have a number yet because the QSO still counted for points. John became a believer and stayed at my transceiver all weekend listening on ten meters even after the band went dead. I stayed with him in case he contacted someone who wanted to chew him out over the air, but it never happened. Even the real contesters stopped to talk to John. I have to say that I haven't run into a rude 10-10'er yet.

Today Monday, before going to work I set up the transceiver for ten meters so he could just turn it on and operate. I figured the band would be dead, and everyone would be at work, but I knew he would want to listen to 10 meters. He searched the band all morning without luck, so he decided to call CQ after lunch (after several QRLs). Luckily he choose 28.415 which I think is a local calling frequency. Someone came back to him after his first call, they had a nice QSL until the guy mentioned to John that "you must have gotten your Tech+ to be on 10 meters". Well John knew he didn't have his tech+ yet, and got all flustered thinking he was operating out of band. He excused himself and signed off. He called me and I explained to him that most people start as codeless techs. He got up his nerve and turned on the radio again, and called the other station so he could finish the QSO. The guy was still monitoring and answered his call. John then explained to him that he was a NOVICE with HF privileges. The guy didn't know what a Novice's privileges were, so John explained that the first FCC test he passed was the 5 WPM test. This impressed the guy, and after that the QSO went on normally. Shy John managed to keep his composure and finish his first QSO without me being there.

He wants to get a QRP-ARCI, and QRP-L number just like Dad. He's even looking forward to the arrival of our WBL keyer. He wants to get his speed up so he can participate in the fox hunts.

I will have to postpone QRP-L til Saturday afternoon. See everyone after then.

72,

Steve Pituch, N2MNN
(proud father of John, KC2CFZ (Novice))

Date: Mon, 4 Aug 1997 12:18:06 edt
From: w8lrm@juno.com (Albert K. Rea)
To: qrp-l@Lehigh.EDU

Subject: [24330] TT 515 Accessories ?
Message-ID: <19970804.191853.11511.0.w8lrm@juno.com>

I have a TT 515 with matching power supply and audio filter. What other accessories were made for this unit ?? Looking for other TT accessoiesy that have the matching paint color. (Charcoal or Black) Please e-mail direct to w8lrm@juno.com

THanks and 72/73

Date: Mon, 04 Aug 1997 19:31:19 -0400
From: Paul Stroud <aa4xx@ipass.net>
To: klqrp <klqrp@acpub.duke.edu>
Cc: QRP-L <QRP-L@Lehigh.EDU>
Subject: [24331] Roanoke VA ValleyFest '97
Message-ID: <33E665EF.77B@ipass.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi Gang,

The Roanoke Valley (Virginia) ARC has invited the Knightlites to present a QRP forum at ValleyFest '97 on Saturday, August 16th from 11:00AM - 12:30PM. The KnightLites would like to invite QRP'ers from throughout the region to join us for this forum. The QRP forum will include the following four "mini-sessions" (each 20 minutes long with a brief break between each session):

1) QRP Equipment Roundup - by Rob Capon, W3DX (ex WA3ULH)
   Rob will be sharing some of his QRP collection with the group, including rigs, antennas, and accessories. Rob has authored a host of QST articles, including --"Build a Walking Stick Vertical," "A Simple 20M Phased Array," "The QRP Tackle Box," "Harkers Island on the Air," and many others.

2) Surface Mount Basics - by Todd Nichols, Ph.D., KB0HQU
   Todd works as an RF design engineer with Ericsson. Todd will be demonstrating the "how's" and "why's" of SMT technology. He'll even show us how to whittle down the size of our next QRP project!

3) Comparing Antenna Tuners - A Study in Efficiency -
   by Bob Kellogg, AE4IC
   Many of you will remember Bob's postings to QRP-L concerning the series of tests he ran on various antenna matching units. His

results proved to be both revealing and surprising. In this session, you will learn what to look for in your next antenna tuner.

4) Portsmouth Island QRPedition Video- by "The Portsmouth Gang"-- (WB4OFT, AE4IC, and AA4XX). This past April, the KnightLites went on our first QRPedition--to uninhabited Portsmouth Island. We logged around 400-500 QSO's -- most of them being DX contacts. The video captures the excitement of being on the receiving end of a DX pileup. Also shown on the video is the wide variety of rigs and antennas that were used on this QRP adventure.

The Roanoke ValleyFest will be held at the Roanoke Civic Center Exhibition Hall - I-581 & Williamson Road, Roanoke, VA. Doors open at 9:00 AM. Talk-In on 146.985 (-600)

For more general info on the hamfest, please contact Terry (AE4EW) at: ae4ew@ix.netcom.com or (540) 890-6782.

The Knightlites look forward to meeting you August 16th at ValleyFest! Carpooling is available from the central NC area.

72,
Paul Stroud, AA4XX Raleigh, NC (919) 779-1637

Date: Mon, 04 Aug 1997 21:00:38 EDT
From: kc5moe@juno.com (John E Hutter)
To: rakefet@rakefet.com
Cc: qrp-l@Lehigh.EDU
Subject: [24332] Re: 10 meters? Let's use CW!
Message-ID: <19970804.200403.7175.1.KC5MOE@juno.com>

Vic,
Did I just hear a motion to inauguarate the 10-10-A1A club?
Well said, count me in!
72/73 de KC5MOE -- John

"A sucking-chest wound is Nature's way of telling
you that you've been in a firefight." --Unknown

On Mon, 04 Aug 1997 08:07:39 -0700 Vic Rosenthal <rakefet@rakefet.com> writes:
>With all the discussion about the 10-10 guys on SSB, I suggest >that we start plowing up the fallow area of 10 meters -- the CW >band. I haven't had a 10-meter CW QSO in literally years.
>Every time I listen I hear more and more illegal SSB, AM and

>other garbage there. This is a pity, because this is probably
>THE MOST EFFECTIVE QRP DX >BAND/MODE! When the sunspots were
>high, I routinely worked all over the world with QRP and simple
antennas, including working DXpeditions >through pileups.
<snip>

Date: Mon, 4 Aug 1997 19:04:12 -0600
From: ji3m@maxwell.com (James R. Duffey)
To: maprath@prairienet.org (Mark A. Prather)
Cc: qrp-l@Lehigh.EDU
Subject: [24333] Windom Not Best Choice for Multiband Antenna (long)
Message-ID: <v02130500b00c1b110613@[192.31.66.229]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Mark-I read your post asking for comments on the use of Windoms. This has been discussed previously on the list, and I have even contributed to these discussions, but I could not find my previous post to repost. So I will take a stab at it anew. You may also wish to peruse the archives.

While Windoms, and their relations, are in fairly widespread use in the QRP community, I would recommend against the use of a Windom or off center fed antenna because there is substantial feed line radiation. This is the case for the traditional single wire fed Windom as well as for the off center antennas fed with a "balanced feed" (Carolina Windom). These antennas are often called Windoms. The feed point is not truly balanced as it is not at a current or voltage loop. The feed line radiation for a reasonable length feed line, say 66 ft on 40 meters, can approach that of the antenna itself.

This feed line radiation is undesirable largely because its effects cannot be easily quantifiable. It will alter the radiation pattern. If one is relying on the directivity of a long wire on higher bands it can destroy that directivity by putting up to half the power into an omnidirectional pattern. If a substantial portion runs horizontally close to ground, then there will be undesirable high angle radiation on the higher bands, and greater ground losses on the lower bands. If some of it runs parallel to electrical wiring it may lead to increased noise pickup. If some of it lies next to your TV feed line or phone line you may have increased problems with interference. Although attempts to control these feed line currents with choke baluns have been made, even those who have tried it admit it is a difficult problem and the problem is never quite resolved. There is an excellent article on off center fed antennas in one of the Antenna Compendium volumes. The author still reports some currents on the outside of the coax with a 4:1 choke balun and a 1:1 choke balun in series at the antenna feedpoint and a 1:1 balun at the transmitter feedpoint. I can look

up the exact reference for you if you wish.

That said, there are many satisfied off center fed antenna owners. They probably have situations where the feed line radiation does not cause problems, but one cannot be sure until one tries it at a particular location You will probably hear from some of them in response to your post. If you are still curious about Windoms you may wish to try one and form your own opinions. The dimensions can be found in the above Antenna Compendium article. The Windom by itself does not cover all bands, but Belrose has published a short article in QST 6 or 7 years ago which parallels two off center antennas for all band coverage. You may wish to look into this.

Now, if you are looking for a "decent, general "all-band" type antenna", there are, in my opinion, better choices than the Windom. You should realize that by accepting all band as one of your criteria you usually accept some compromise in another area such as convenience, performance, ease of construction, or durability. You may wish to have two or more "all band antennas" to minimize the compromises made. I suggest the following multi band antennas for your consideration;

1. Paralleled half wave dipoles. When constructed for harmonically related bands; 80, 40, 20, and 10 and with a foot or more separation between the end of a dipole and the other dipoles these offer good performance for low cost and ease of construction. They should be fed with a 1:1 choke balun or coiled feed line. When erected as an inverted vee they are an easy way to achieve height with accompanying low angle radiation.

2. A dipole fed with varying lengths of balanced feeder. Cecil, W6RCA, promotes this type of antenna and details can be found on his web site. If you build one you will understand a lot about transmission lines when you are through. Several switches or relays are required to be thrown when going from one band to another, but this is a simple and cheap way to get multiband performance. A 1:1 choke balun should be used with this antenna. This antenna should not be erected as an inverted vee if it is to be used on frequencies where it is longer than a half wave. The low angle radiation performance will degrade when erected as an inverted vee. This is due to points of maximum current lying closer to ground than with a simple dipole.

3. Coupled resonator antennas. For bands which are not harmonically related, such as the WARC bands, a coupled resonator antenna may be a good choice. I have one on the drawing board. They are discussed by Breed in Antenna Compendium Vol. 5.

4. Loop antennas with varying feed line lengths. A 30 M (in circumference) loop makes an acceptable all band antenna. The antenna can be used as a normal loop on 30M when fed through a 75 ohm quarter wave transformer and 1:1 balun. When fed with about 5 M of balanced feed line it makes a good

antenna for 40M, 20M, 15M, and 10M, although there will be considerable high angle radiation on 15M and 10M. When fed with about 7.5M of balanced feedline it will be a good antenna on 17M and 12M, but there will be high angle radiation on 17M. The antenna can be fed as a vertical on 80 M by tying the ends of the 5M feed line attached to the loop together and feeding against a good ground. These lengths are approximate, exact lengths should be obtained by experimentation or calculation. Alternately, a feed line switching arrangement similar to what Cecil uses for his dipole can be employed.

Let us know what you end up doing. - Duffey KK6MC/5

James R Duffey KK6MC/5 DM65
30 Casa Loma Road
Cedar Crest, NM 87008

Date: Mon, 4 Aug 1997 20:32:19 -0400
From: "Dean Marzocca" <n2tnn@ifu.net>
To: "QRP-L" <qrp-l@Lehigh.EDU>
Subject: [24334] SWL report
Message-ID: <199708050033.UAA04131@ifu.ifu.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Thanks to all who commented on the reply procedure for the SWL card. It is nice to get such a report and as one person reminded me, "you never know who is listening".

Two other confessions before we close this out. I must admit they were out of ignorance, before my involvment on this list, before my huge QRP intelligence gained from this list, out of fear of not being heard, before the word "rig kit" was an unknown, greed in collecting QSL cards, or what ever you might think BUT

it was on phone
it was 100 watts.

I feel better telling you all that it won't happen again HiHi :-))
lets get back to this ERP thread... 5 watts into a high gain wire yagi, 4 elements, low angle hmmmm...

72/73   Dean   N2TNN NJ
n2tnn@ifu.net

Date: Mon, 4 Aug 1997 20:34:35 -0400 (EDT)
From: N3BJ@aol.com
To: qrp-l@Lehigh.EDU
Subject: [24335] FS: MXM 40M xcvr
Message-ID: <970804203423_820961005@emout01.mail.aol.com>

Above in good shape, works fine, needs alignment. In case, manual included.

$80 shipped

Alan, N3BJ

Date: Mon, 04 Aug 1997 22:30:52 -0400
From: Hank Kohl K8DD <k8dd@contesting.com>
To: prvalko@Oakland.edu
Cc: "Low Power Amateur Radio Discussion" <qrp-l@lehigh.edu>
Subject: [24336] Re: 10-10 club?
Message-ID: <2.2.32.19970805023052.006c58cc@tir.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 10:38 PM 8/3/97 -0400, Paul R. Valko wrote:
>On Sun, 3 Aug 1997, David Smith wrote:
>
>> Frankly, I don't like having to write this posting, but I have had
>> three guys in a row on 10 Meters ask me if I was a member of the
10-10 club.
>> When I said "no," they refused to talk to me any further.
>
>Sounds familiar...
>
>> Thus far I have to say that I have not been impressed with the
>> "10-10ers" I have met. I can get that sort of treatment on 11 Meters.
>
>Saddly, my experience with 10-10 members has been identical. I have twice
>been told in no uncertain terms to get off the band because I was not a
>member and those few bad apples spoiled that band for me.................
>Now, I know there are tenten members in QRP-L, but before you light up the
>flame thrower, ...

Uh...If you go above 28.500 it is a lot cleaner. A lot quieter, too!

>Until then, just give 'em the serial number off your rig or tell them how
>much money you have in your pocket and that seems to appease them.

Yeah, they seem to like the "twenty seven doolars and 298 cents" that I
give them!

10-10 was great when it was started - excellent concept to keep 10
alive, but unfortunately it has become degraded due to a few!

73   Hank   K8DD

*/   Hank Kohl K8DD   k8dd@contesting.com
*/   ARRL TS   (k8dd@tir.com)
*/   MI-QRP - Vice Pres. QRP-ARCI - Director
*/   G-QRP   ARRL/LM   QCWA/LM   QCAO/LM

Date: Mon, 04 Aug 1997 22:03:21 EDT
From: kt3a@juno.com
To: n4so@juno.com
Cc: qrp-l@Lehigh.EDU
Subject: [24337] Re: 10-10 club?
Message-ID: <19970805.214623.5327.15.kt3a@juno.com>

Hey, since TenTen has many affiliated chapters,
what do you say we start a QRP chapter? ;-)
Do they offer any QRP awards?

Cameron C.R. Bailey <><
Amateur Radio, KT3A
kt3a@juno.com
Mount Wolf, Pennsylvania

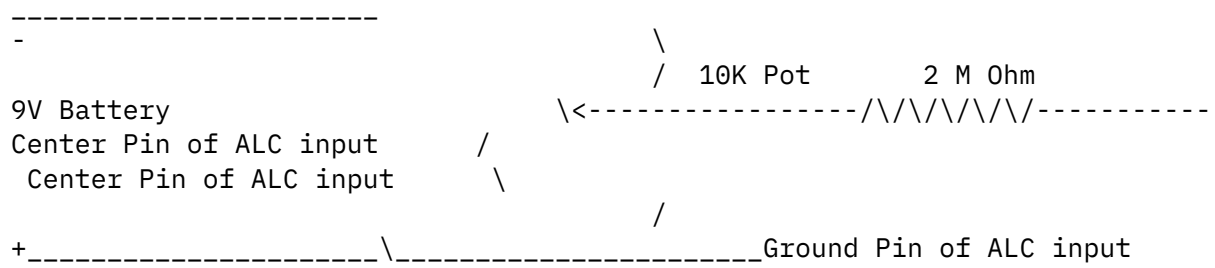
Date: Mon, 4 Aug 1997 23:04:14 -0400
From: "Steve & Anne Ray" <sbralr@worldnet.att.net>
To: "QRP Group" <qrp-l@lehigh.edu>
Subject: [24338] Re: QRP(p) via ALC
Message-ID: <19970805030442.AAA28878@pentium>

MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Hi Gang,

Thought I should pass along my ALC QRP mod I use with my HW-101. This was the original. I now use a small multi output power supply that runs several
accessories. Anyway the principle is simple and your finals will last forever.

On CW I control the power with the front panel Mic/CW level control. Obviously on SSB you cannot do this. I use the following simple circuit to bias the ALC input on the back of the rig.



Use shielded wire. Note that the 9V battery is hooked up to negatively bias the ALC line. What you are doing is making the rig think the ALC from a linear is being over driven. It works great and you can control the power from 1 to 2 W up to the full power out of the rig. Simply tune up the rig in CW then go to SSB and adjust the pot to the desired output. Values are not critical.

This is a old trick, I learned years ago.

72

Steve Ray K4JPN ex K1VKW HW-101, HW-8, SWL 30-40 and NC 38S Heath Kit fan

---

Date: Mon, 04 Aug 1997 23:23:15 -0400
From: Randy Hargenrader <randyh@harksystems.com>
To: qrp-l@Lehigh.EDU
Subject: [24339] Curses! Foiled Again!!
Message-ID: <33E69CA3.6F6D@harksystems.com>

MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Gang,
The thunderstorms rolled into my area - "right on time" at 9pm
keeping me from operating for the first hour of the Spartan Sprint.
However, I did gingerly operate after they passed hoping there wasnt
a stragler cloud full of lightning waiting to make me a genius for
a short time "Phenomenom" style.
But hey, I lived and came away with some fun for the night.
Coulda been a world record night with my "pipeline' into CA!
ALL my qso's were from CA stations!!!
Special thanks to AB7TN and W7QQQ for trying to help me work
a different state! You guys just droppd outta site fm QSB!
--
73, (Sir)Randy WJ4P
Knightlites QRP-L #296 ARCI #9152 1996 40-9er High Scorer

Date: Tue, 05 Aug 97 03:56:00 PDT
From: "Ken Newman" <N2CQ@comten.com>
To: "Carpenter, Russ - AA7QU" <russ@natworld.com>
Cc: "List, QRP-L" <QRP-L@lehigh.edu>
Subject: [24340] Spartan Sprint
Message-ID: <MAPI.Id.0016.00324351202020203030303430303034@MAPI.to.RFC822>
MIME-Version: 1.0
Content-Type: text/plain; charset="ISO-8859-1"; X-MAPIextension=".TXT"
Content-Transfer-Encoding: quoted-printable

I was lucky to be on vacation when the August Sprint came along
so I had a chance to join the fun, instead of going to work
in the evenings. I tried to run the Explorer on 40 at 1 w
on a battery pack of 8 AA cells for a while. Mark
N2VPK was the only QSO for the first halfhour so I went to
20 with the big battery pack (7.7 lb). Had to do that since
the MFJ-9020 would drain the AA Pack in about 1 qso. More fun
on 20. Lots of guys in Ca, AZ, and TX. Good signals from CA too.
Back to 40 for the last halfhour with the Big Pack. Still nobody there =

again until the last 5 minutes which I was lucky for a QSO on WI and MI. =

It is a interesting 2 hours and I will try it again when I can.
Summary:
40 meter QSOs: 3
20 meter QSOs: 11

Equipment:
Explorer II: 2.0
MFJ 9020:   ?.?
Keyer CMOS II: 0.8
Paddle Whitrook: 0.1
R/S Spkr (Amplified): 0.4
SB752 Powr Station: 7.7 est.

Looks like 11 lbs of equipment(outside of antenna).

Points per pound: 2.27 ?
73,
   Ken Newman, N2CQ
   Woodbury, NJ
   N2CQ@comten.com

Date: Tue, 5 Aug 1997 04:31:25 GMT
From: k8cv@juno.com (Walter D Amos)
To: qrp-l@Lehigh.EDU
Cc: tentec@contesting.com
Subject: [24341] For sale Scout 555 complete......
Message-ID: <19970805.043130.9918.1.k8cv@juno.com>

Hi:

I have for sale a scout 555 with all the band modules, the 938 switching power supply, 701 hand mike, manual and un-used mobile mount. In excellent shape. Price $650 . k8cv@juno.com

Walt K8CV

Date: Mon, 4 Aug 1997 21:49:18 -0700 (MST)
From: Joe Gervais <vole@primenet.com>
To: qrp-l@Lehigh.EDU
Cc: randyh@harksystems.com
Subject: [24342] Re: Curses! Foiled Again!
Message-ID: <199708050449.VAA26621@usr02.primenet.com>

Randy (WJ4P) wrote:

>
> Special thanks to AB7TN and W7QQQ for trying to help me work
> a different state! You guys just droppd outta site fm QSB!

Actually it was AB7TT, but before I could get a correction
to you the band dropped into the abyss. Argh! :-)

Rough night here too! Big thunderstorms around the valley
made for some hellacious QRN. Managed to work states
across the US (AZ, CA, GA, IL, MI, NY, NJ, TN, TX, VA)
but it wasn't easy on either side. N2VPK in NY and N2CQ
in NJ were my DX for the evening. Thanks guys!

Anyway, thanks to all who hung in there with me. Using
a vertical antler in a valley surrounded by thunderclouds
is a very interesting way to spend the evening. Now I think
I'll go watch some static on the TV just to round things
out. :-)

POINTS:
12 Qs (20m) = 24 pts

WEIGHT:
 1.50 (Sierra, 20m band module - no tuner)
 0.30 (Straight key, no base)
 0.05 (Sony "earbud" earphones - They weigh less than a band module)
+0.53 (8 AA batts w/ holder)

 2.38 lbs == 2.4 lbs Total weight

POINTS PER POUND: 24 pts / 2.4 lbs = 10.0 pts/lb

Finally hit 10 pts/lb!

Cheers de AB7TT,

-Joe, vole@primenet.com, AZ ScQRPions (Phoenix)

"It was the monkeys! The monkeys did it!"

Date: Tue, 5 Aug 1997 00:48:52 -0400 (EDT)
From: Wayneb1103@aol.com
To: qrp-l@Lehigh.EDU
Subject: [24343] HW-7 for sale
Message-ID: <970805004851_821120437@emout11.mail.aol.com>

My dad wants to sell his HW-7. It was working last time he used it but that has been several birthdays back. If you want it we will ship it COD for $50.00. I believe that there is a manual around as well.

Wayne WB7WHI
Spokane, Wa.

Date: Mon, 4 Aug 1997 23:59:29 -0500 (CDT)
From: Raventhorne <jelder@ix.netcom.com>
To: kd1jv@moose.ncia.net, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [24344] Re: More steel rails
Message-ID: <2.2.16.19970804215916.37a771ae@popd.ix.netcom.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 11:20 AM 8/4/1997, Steven Weber wrote:

>But, RR tracks might be a good antenna for hearing "natrual" radio waves
>and other VLF stuff. That might be interesting...

It's =MUCH= safer to work with a loop antenna. Make a 10 ft triangle out of pvc pipe and wrap several hundred feet of wire around it. Run both ends of the wire through a 60 Hz notch filter & then filter for 300 Hz to 3 kHz or so. Amplify. This can be especially interesting to listen to when there are plenty of thunderstorms at your geomagnetic longitude, but at the opposite lattitude.

I've not done this, but an old VLF hound told me about this once. Someday I'll try.

72,

John

@~~~
@ John Elder, Ko6TS
@ PHROG (Pagan Ham Radio Operators' Guild)
@ Box 232, El Segundo, CA 90245
@ Does a psychologist eat his Jung? How does his inner child feel about this?

Date: Mon, 4 Aug 1997 23:59:30 -0500 (CDT)
From: Raventhorne <jelder@ix.netcom.com>
To: dgf@netcom.com, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [24345] Farnell / Newark
Message-ID: <2.2.16.19970804215919.293fb330@popd.ix.netcom.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 02:35 PM 8/4/1997 -0700, David Feldman wrote:
>You can also go to the FARNELL (previously known as newark) catalog

Not here in CA. Farnell is associated with Newark. Both catalogs are still
available here.This is nice, because the Newark catalog has far more items
to choose from.

72,

John

@~~~
@ John Elder, Ko6TS
@ PHROG (Pagan Ham Radio Operators' Guild)
@ Box 232, El Segundo, CA 90245
@ Does a psychologist eat his Jung? How does his inner child feel about this?

Date: Mon, 04 Aug 1997 22:30:35 -0700
From: Bill Todd <bill@techline.com>
To: kt3a@juno.com
Cc: qrp-l@Lehigh.EDU
Subject: [24346] Re: 10-10 club?
Message-ID: <1.5.4.32.19970805053035.006e2efc@mail.techline.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 10:03 PM 8/4/97 EDT, you wrote:
>Hey, since TenTen has many affiliated chapters,
>what do you say we start a QRP chapter? ;-)
>Do they offer any QRP awards?

I am with you Cameron. I also like the idea of having the group be a CW
10-10 group. The 10-10 Club does have one or two CW contest each year, yet
that is a VERY long time to wait between QSO's.

Perhaps the 10-10 club will not favor such a move. If not, perhaps the various QRP Clubs would be willing to run a 10 meter ONLY cw contest. If the bands happened to be open (during the test), we would have a great deal of fun!

CUL, Bill-N7MFB
http://www.techline.com/~bill

Date: Tue, 05 Aug 1997 07:06:30 EDT
From: k5zty@juno.com (WILLIAM A STIETENROTH)
To: qrpdave@ocsnet.net
Cc: qrp-l@Lehigh.EDU
Subject: [24347] Re: 10-10 club?
Message-ID: <19970805.110047.5199.0.k5zty@juno.com>

Dave,

The 10-X number crap is a great example of what all of the phone bands will be like as soon as the CW requirement is eliminated.
Without CW it's just CB.
72,
Bill, K5ZTY
Houston.TX
k5zty@juno.com

Date: Tue, 05 Aug 1997 07:06:30 EDT
From: k5zty@juno.com (WILLIAM A STIETENROTH)
To: QRP-L@Lehigh.EDU
Subject: [24348] SP results
Message-ID: <19970805.110047.5199.1.k5zty@juno.com>

This is my first entry in the Spartin in a long wnile. My rig hasn't lost any weight, but It's still fun to participate.
OHR-400, DD-1, KENT PADDLE, HEATH HDP1396 HEADPHONES, 475 AH DEEP CYCLE MARINE BATTERY. Total weight probably 60 lbs.(I go camping in a pickup)
All contacts but one were on 20 meters.
N4ROA

N4TN
AC6RN
W6ZH
WF6B
N2CQ
W7QQQ
W5VBO
N4OLN
W5SB
N4ROA (The only 40 metrer contact)
KF6CTA
N6MM
KO6KA
N6GA
Thanks for letting a fatboy play
72,
Bill, K5ZTY
Houston, TX
k5zty@juno.com
" Without CW it's just CB "

Date: Tue, 5 Aug 1997 07:38:53 edt
From: k4wz@juno.com (RON L TODD)
To: qrp-l@Lehigh.EDU
Subject: [24349] club
Message-ID: <19970805.073856.4519.4.K4WZ@juno.com>

If you looking for a club
FISTS is a great CW club, I and my twin boys (age 12) are members. They
meet on several frequencies 14.058 and 7.058 are two.
want info just ask.
73 Ron   Fists # 2109

dit dit

Date: Tue, 05 Aug 1997 08:48:41 -0500
From: Marty <mlp@flash.net>
To: qrp-l@Lehigh.EDU
Subject: [24350] SWR Analyzer
Message-ID: <33E72F38.2361@flash.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

I've been thinking about getting an MFJ SWR Analyzer (#259) to use in checking out various antennas for HF bands.

Does anyone have experience with this unit they'd like to share?

Any competition I should consider before making a purchase?

Thanks,

Marty Porter, N5SXV

Date: Tue, 5 Aug 1997 09:57:52 -0400 (EDT)
From: K5BDZ@aol.com
To: lycott@fox.nstn.ca, qrp-l@Lehigh.EDU
Subject: [24351] Re: Noise reduction w/ LM386
Message-ID: <970805095740_952155989@emout05.mail.aol.com>

BOB
A SERIES 15K resistor and .0047 MFD Cap Between LM386 pin 1 and pin 5 (output) is an antihiss circuit I purloined from the St Louis QRP Society mag. Filter peaks around 800 Hz and, according to article, 3db points are approx 200 Hz and 3KHz.

Good Luck
Bill, K5BDZ

Date: Tue, 5 Aug 1997 10:07:03 -0400 (EDT)
From: K5BDZ@aol.com
To: w4bws@juno.com, qrp-l@Lehigh.EDU
Subject: [24352] Re: CUSHCRAFT verticals PROBLEM
Message-ID: <970805100700_78420441@emout02.mail.aol.com>

The cushcraft verticles that require no radials, a la R5, R7,, etc normally have about 4 four foot radials at the base near the matching circuit/input box. These radials canno stand any non-antenna metal between them (especially between them) or around them within roughly 2 feet minimum.

I had problems with cushcraft' s stonewalling attitude when I called them, so after finding the problems, I wrote them of my findings in hopes they would include my findings in their manuals or customer service. To my knowledge,

they have not. "Wet Roof syndrome?" Love that tech talk!

Bill, K5BDZ

Date: Tue, 05 Aug 1997 08:34:51 -0600
From: "Phil, K6LS" <k6ls@qsl.net>
To: mlp@flash.net
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [24353] Re: SWR Analyzer
Message-ID: <33E72BFB.44AF@qsl.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

.....
> Any competition I should consider before making a purchase?....
> Marty Porter, N5SXV

I have the MFJ unit in question... It would be hard for anyone to get
me to sell mine, but if I had to buy another analyzer, I would seriously
look at the Autek units, they have two, one hf and one vhf-uhf (~).

There are also units made by AEA (?) and Bird now has a couple....
--
73 de Phil, K6LS/0
QRP-L #612
k6ls@qsl.net <or> k6ls@amsat.org
DM79or, Arapahoe County, Colorado
ITU zone 7, CQ zone 4
http://www.qsl.net/k6ls

Date: 05 Aug 1997 11:02:15 -0400
From: Glen Leinweber <leinwebe@mcmail.CIS.McMaster.CA>
To: qrp-l:;
Subject: [24354] Re: Bridges?
Message-ID: <1997Aug05.110215-0400@[130.113.234.7]>

Gang,
     By golly, do I smell a theme for an upcoming QRP-to-the-field?
QTH: abandoned rail lines, bridges, towers etc?....

In <19970803.211305.5327.12.kt3a@juno.com>, kt3a@juno.com wrote:
[...]
>I do have access to an abandoned
>steel bridge, open to the public.
>It was too costly to tear
>down when a new one was built.
>Now it is open to pedestrians
>It is not a rail bridge, it was
>a single lane bridge for automobiles.

Date: Tue, 5 Aug 1997 11:11:30 edt
From: w8lrm@juno.com (Albert K. Rea)
To: qrp-l@Lehigh.EDU
Subject: [24355] FS   TT-509
Message-ID: <19970805.111205.7063.1.w8lrm@juno.com>

I have a Ten Tec 509 complete with matching power supply
audio filter and calibrator for sale. All with complete instructions,
microphone and original cartons. Asking $425.00 (incl shipping
conus) for thwe package. For Michigan folks I will have it at the
State ARRL Convention on Sunday Aug 10th. This is a nice clean
package that needs a new home.

For more info, e-mail to w8lrm@juno.com

72/73......de......

Al   W8LRM
St Joseph, Michigan
on Michigans Sunset Coast

Date: Tue, 05 Aug 1997 11:49:06 -0700
From: Jim <kw3u@warwick.net>
To: K5BDZ@aol.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [24356] Re: CUSHCRAFT verticals PROBLEM
Message-ID: <33E775A2.77E9@warwick.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

K5BDZ@aol.com wrote:

>
> The cushcraft verticles that require no radials, a la R5, R7,, etc normally
> have about 4 four foot radials at the base near the matching circuit/input
> box. These radials canno stand any non-antenna metal between them
> (especially between them) or around them within roughly 2 feet minimum.
>
> I had problems with cushcraft' s stonewalling attitude when I called them, so
> after finding the problems, I wrote them of my findings in hopes they would
> include my findings in their manuals or customer service. To my knowledge,
> they have not. "Wet Roof syndrome?" Love that tech talk!
>
> Bill, K5BDZ

 My R-5 which is mounted on a 40ft RS telescoping mast strapped
to woodburning stove chimney on side of house; has it's radials
about 2 - 3 ft above and next to metal chimney cap, and I have
a bunch of tieraps attached to one bolt for holders/passthru's
for my longwires(it serves as a missing tree for my dipoles etc
:))   Been up bout three years now, and I love it,low swr;
rugged(been a couple nasty winters and windstorms). I did take
the trouble to use krylon coating spray after assembly and tune-up.
I'm very pleased with it.
     P.S. It played very nicely on 10m 10-10 past week, most sigs
were much stronger as compared wid my tri-band A3. No 10-10 #
and all op's were nice and ragchewed a bit(they were all in the
south,fla-ga-tn etc.)
                          72 Jim kw3u

Date: Tue, 05 Aug 1997 11:00:24
From: Steven Weber <kd1jv@moose.ncia.net>
To: qrp-l@Lehigh.EDU
Subject: [24357] UPS strike
Message-ID: <3.0.1.16.19970805110024.30bfe69a@mailhost.ncia.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Rats, I hope this strike doesn't last long. Really throws a monkey wrench
into my just-in-time parts percurment plan.

Makes you realise just how quick we would all starve if all the trucks
stopped rolling...

Steve, KD1JV....In the White Mountains of New Hampshire

"Melt Solder"

Date: Tue, 05 Aug 1997 12:22:19 EDT
From: wa5whn@juno.com
To: qrp-l@Lehigh.EDU
Subject: [24358] Sprints from DM65sf, well, almost.
Message-ID: <19970805.101813.3375.0.wa5whn@juno.com>

qrp-lers,

  Armed with one Sierra & GM-20 xcvr, and dipoles, I was ready to hike back up the mountain to a spot, that overlooks La Cueva Canyon, in the Sandia Mountains (west side facing, grid square: DM65sf). The day before, it was beautiful, since we (Local Amateurs) had provided emergency communications for the La Luz Trail Race (9 mile run - 5,000 feet rise in elevation). WB5LYJ & I were at the La Cueva overlook. Even had a chat on 6 meters FM (52.525 MHz) during the race. OK, I will return to the look out, just below this site, for the Sprint, the following day. Battery (2 amp-hr.), antennas & radios were less than 27 lbs.. Well, I had dialed up 162.4 MHz (Wx broadcast), and flash flood warnings were issued, plus I could hear that famous low freq. rumble off in the distance. Hey, it's not going to bother me. It's clobbering AB7TT & Crew in Az.. ;-)

  Just in case, I had packed my rain gear too, and I would make a mad dash to the cave, in La Cueva Canyon, in case the wx changed. Well, it had changed. Lightning bolts dropping out of the sky all around me. There was no way I was going to become a Human lightning rod, in this type of enviroment. FYI- A Hiker was killed the same day, on top of Santa Fe Baldy, by lightning.

  I had dashed for the cave & waited. Hey, this storm won't last long. Yeah, right...

  I did not get to operate, watched Ma Nature's electrical bolts dance all around me. Did not even unpack the antennas. I had known better. So, my score: 0. But, I will live to talk about it.

  I had even packed W6RCA's Ft. Tuthill antenna presentation in the backpack, for just such emergencies, plus Tom Clancy's "Executive Orders". :-)

72...Jay, WA5WHN

DM65qd Albuquerque, NM

Date: Tue, 05 Aug 1997 11:30:19 -0700
From: n4js@amsat.org
To: qrp-l@Lehigh.EDU
Subject: [24359] QRP Afield
Message-ID: <E0wvmRg-0005mW-00@admin.cyberenet.net>

Can anyone tell me FOR SURE if QRP Afield (The NE QRP Club Event), on
September 20 is still on? I scheduled a vacation day specifically for it,
and if it is cancelled, kind of would like to know.


```
 _  _  _ _      _  ___   John L. Sielke n4js@amsat.org n4js@pobox.com
| \| || | |  _ | |/ __|  n4js@n4js.ampr.org  NJ Grid:FM29LN
| .` ||_  _|| || |\__ \       http://www.qsl.net/n4js
|_|\_|  |_|  \__/ |___/  NJ-QRP #57  QRP-L #884  QRP-ARCI #9328
NE-QRP #507 G-QRP #9544 CQC CQrp Norcal #1989  QCWA FISTS #2781
```

Date: Tue, 5 Aug 1997 09:49:46 -0700
From: Jim Bennett <jbennett@ebmud.com>
To: "'QRP-l Postings'" <qrp-l@Lehigh.EDU>
Subject: [24360] Sierra Power Mod Info
Message-ID: <01BCA184.EA3AAC40@jbennett.ebmud>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

I built a Wilderness Sierra several months ago, and have been
using only a 40 meter band module in it. Power output runs
about 2.5 watts, maximum. I've been able to make lots of QSOs
with it like that - no problem.

Just completed the 30 meter band module last night. Sadly, after
going through the adjustments, I only get one watt output into a
dummy load. I would love to boost it up; 5w would be exceptional,
as I'll be taking it to Mexico with me in a couple weeks, and
would like to be confident of being able to pass out XE3 QSOs
(and follow-up QSLs) with it.

Can someone point me in the direction of any web page(s) that
might have information on relatively simple mods to the
rig that will beef up the power output a tad?

I looked through the QRP-l archives, but that appears to be a
very time consuming process, and info on what I am interested
in is not necessarily in one spot.

I do the digest thingy here, so if you could e-mail me directly
that would be a big help.

Thanks in advance, Jim / W6JHB

+--+
+   Jim Bennett / jbennett@ebmud.com
+   East Bay Municipal Utility District (EBMUD)
+   Supervising Systems Programmer
+   375 11th St. / MS 302
+   Oakland, CA 94607
+
+   Voice: 510-287-0224 fax: 510-287-0373
+--+

Date: Tue, 5 Aug 1997 13:11:11 -0400 (EDT)
From: Chris Cartwright <ccart@dns.vidtel.com>
To: QRP Reflector <qrp-l@Lehigh.EDU>
Subject: [24361] Re: SWR Analyzer
Message-ID: <Pine.LNX.3.93.970805130346.776F-100000@dns.vidtel.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Tue, 5 Aug 1997, Marty wrote:

> I've been thinking about getting an MFJ SWR Analyzer (#259) to use in
> Does anyone have experience with this unit they'd like to share?

For me it's like my right hand! Wouldn't want to be without it. Then
again I'm always picking at antenna stuff so it comes in handy. The only
problems that I've had with it are the SWR meter "sticking" in warm
weather, and it is *NOT* miserly about batteries. I've never used any of
the Autek RF series, but I have heard similar opinions on them. Guess
it's a case of liking what you have. I tend to leave mine connected to
the tuner so that I can "pre-tune" the dipole before I even fire up the
rig.

SUMMARY: Get one, I don't know anyone who has one and doesn't like it.

-- Chris Cartwright,   Technical Engineer | ccart@vidtel.com   --
-- N3XRV   QRP WAS 17/9 (w/c) | ccart@erols.com   --
-- QRP-L #655 NORCAL #1891 QRP-ARCI #???? | http://dns.vidtel.com/~ccart --
-- WIMPS Q's=04 30M=04 17M=00 12M=00 STATES=03/00/00 DX=00/00/00 QSL's=00 --

---

Date: Tue, 05 Aug 1997 13:47:34 EDT
From: wa5whn@juno.com
To: qrp-l@Lehigh.EDU
Cc: bowles@cmf.org
Subject: [24362] QRP AField, Sept. 20th
Message-ID: <19970805.114312.7327.1.wa5whn@juno.com>

qrp-lers,
  The last time that I had chatted with W1CSB, Chet Bowles (anyone notice that he & his Sons were in "CQ-VHF", Aug., '97 issue, making a movie ?), he said that it was a "go" for "QRP AField", on Sept. 20th. Chet can be reached as bowles@cmf.org, via the internet.
  Even if it was ever cancelled, I would still be there. This is the "Grand Kahuna" of all QRP Field Days. We will be operating from our SES July 4, '97 site

http://members.aol.com/JayMiller/index.html

72...Jay, WA5WHN   DM65qd
Albuquerque, NM

Date: Tue, 05 Aug 1997 11:06:01 -0700
From: David Smith <qrpdave@ocsnet.net>
To: QRP-L@Lehigh.EDU
Subject: [24363] 10-10 club
Message-ID: <B0001253129@ntserv1.ocsnet.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Thanks all of you for setting me straight. The 10-10 club has it's jerks just like any other school, club, organization,. even the Church. It also

has a majority of wonderful people. I probably won't hustle to get my "10-10 number" but I have heard from some great folks and appreciate your responce to a former ignoramus in this area. 73, QRPDave

---

Date: Tue, 5 Aug 1997 14:34:38 -0400
From: "Heron, George" <G.Heron@dialogic.com>
To: "'QRP-L'" <qrp-l@Lehigh.EDU>, "'NJQRP'" <NJQRP@njqrp.org>, "'LIQRP'" <liqrp@waterw.com>
Subject: [24364] Rainbow Tuner News from NJQRP
Message-ID: <c=US%a=_%p=Dialogic%l=EXCHANGE1NJ-970805183438Z-14659@exchange1nj.dialogic.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

Hey Gang,

It's been a real busy summer for us all -- what with Field Day, Bumblebees, picnics and family -- and things have been absolutely hoppin' too with the NJQRP Rainbow Tuner kit!

With the fabulous review done by Richard Fisher KI6SN in the June issue of Worldradio, Rainbow orders for the kit have peaked again last month and have just about depleted our stock of parts ... and we're going in for a THIRD build cycle! More parts are on order, another NJQRP kitting meeting is in the making, and we'll be able to keep the flow of Rainbow Tuners coming to our QRP community!

BTW, I got permission from KI6SN and Worldradio to post the review on our website, so you can check out Richard's impressions of the Rainbow Tuner at http://www.njqrp.org ... just follow the Rainbow links from the home page!

BIG NEWS ... if you needed further reason to get your order in for the next build of the Rainbow Tuner, we have a design-in-progress for a follow-on kit to work with the tuner. We'll have some more details on this soon, but suffice it to say now that the clever and elegant SWR bridge circuit designed by Joe Everhart N2CX is the foundation for a daughter card to add more functionality to the Rainbow. Working in conjunction with both existing Rainbows and new kit orders, this project will be a real pot o' gold for us all!

And speaking of N2CX, some of you may know that Joe's been busier than a one-armed antenna hanger over the summer. His company is testing some

product on location up the Boston area and he's been having a heck of a time staying connected to email, and barely able to operate his new Sierra from hotel windows up there. But as always, if you have any questions regarding his Rainbow Tuner design (or about antennas, or just about anything else), you can still contact our elmer at n2cx@voicenet.com ... rest assured he'll get back to you soon.

Even as busy as he's been, Joe has also been able to supply us with a couple more Rainbow APPLICATION NOTES: 20m Mods, Limited Use with Hamstick, and More on Switching Bridge In/Out. These App Notes have been added to the other 9 already up on the NJQRP website discussing various aspects of construction, design, tips and techniques. Again, follow the Rainbow links from our home page to see them all! (BTW, several app notes were published in the Summer '97 issue of QRPp on page 12 ... thanks Doug!)

And to help make the Rainbow app notes available for those not having website browsing capability, the app notes have been added to our EMBOT file retrieval mechanism. Just send an email to EMBOT@NJQRP.ORG and put SEND APPNOTES in the body of the message. This will command our server to immediately return a text file to you containing the app notes in the body of the email. Actually, I've included almost ALL Rainbow Tuner information in the file to make it an easy reference for requesters. (Still don't have a way to get the schematic and block diagram across.)

In order to help all Rainbow Tuner owners with the various tips & techniques available, and provide further ideas for construction and application, we're forming the RAINBOW TUNER USERS GROUP. This will be a communication and discussion forum serving both the QRPers connected via Internet as well as those not having email. We'll describe more on RTUG soon, but in order to get the juices flowing now, we ask that you tell us *your* story about how you built and are using your Rainbow, what enclosure you used, or what special purpose you have it intended for. (For example, I have one built into my Sierra, in anticipation of the Son of Rainbow!) Even pictures would be great for publishing in the RTUG newsletter, so if you want to show off your construction prowess, this is the way!

Well, that's about it for now. Sorry for the length here but there has indeed been lots on the move with the NJQRP gang and their Rainbow Tuner kit project(s). Get your orders in for the next kitting cycle -- we expect them to go as quickly as the first two builds ... OR, get your soldering irons going to work directly from the project schematic/descriptions in last December's QRPp and last Winter's QRP Quarterly. Either way, a Rainbow is a Rainbow. Stay tuned for more, and thanks for all the encouragement sent along the way!

72/73 all,

--George N2APB and Joe N2CX
g.heron@dialogic.com
n2cx@voicenet.com
http://www.njqrp.org <== Home of the NJQRP Club

PS: All Rainbow Tuner information (ordering & contact information, descriptions, schematic, block diagram, errata, app notes, spec sheet and reviews) can be found by following the Rainbow links from our home page, or via the EMBOT email method described above.

Date: Tue, 05 Aug 1997 12:33:24 -0700
From: Ed Loranger <we6w@qsl.net>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>, Jim W7LS <w7ls@brigadoon.com>
Cc: Homebrew Amateur Radio Discussion <homebrew@qsl.net>
Subject: [24365] Miles/watt Pixie2 GRAND FINALE
Message-ID: <33E78004.4773@qsl.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

All my ducks are in a row.

The pixie2 is here at work with me and tested
with the following results:

Test #1:
436A Power meter with 8481A power sensor calibrated
to 7.04 MHz.

Pixie2 --10dB Pad -- 8481A === 9.98 mW *10=99.8 mW

Test #2:
17401A 100 MHz Oscilloscope.
Pixie2 --51 Ohm Load Resistor -- Scope
Measured:6.4 Vp-p; 6.4/2.828=2.263; (2.263)^2/51=100.4 mW

Test #3:
8471A Xtal Detector:
(Note:Add detector diode voltage drop to measured voltage.)
Pixie2 -- Detector -- DVM
Measured: 2.75V; (2.75+.35)*.707=2.1917; (2.1917)^2/50=96.0 mW

========== OK Everything Agrees ==========

Original pixie2 with wrong capacitor (100 pF) at collector
of Q2:
 Measured:1.32V; (1.32+.35)*.707=1.1807V; (1.1807)^2/50=27.9 mW

Claimed: 637 Miles/.0279 Watts=22,831 Miles/Watt.

==========

Note: The unloaded Pixie2 measures 10.4 Vp-p on the scope.
This erroneously becomes 10.4/2.828=3.677 Vrms
(3.677 Vrms)^2/50=270 mW. Sounds good but it is unloaded.
Also, when unloaded, the line SWR causes huge variations in
the O-scope measurement when the cable length was changed.
No Cable:8.0 Vp-p
3 Foot Cable: 10.4 Vp-p
6 Foot Cable: 12.4 Vp-p.
So Make sure you put a 50 Ohm load when measuring the output.

Also, the QRP Wattmeter at home shows about 100 mw output.

So, all done with that. Nice measurement experience too!

I guess I'm going to rebuild the pixie2 or at least start
with swapping out the stock 3904's. I'm not happy
with 100 mW!

I hope others who have RF Detectors or Germanium Diodes
learn from my experience.

I would be interested in other's who have measured their
Pixie2 and results of same.

Back to the drawing board to beef up the Pixie2.
72's/Ed Loranger
--
72/73 de we6w qrp es cw ONLY (From non-ham to extra in one day!)
HW-8;OHR-100, Pixie2, Johnson Viking II w/VFO.
QRP-L#1068/Norcal#2227/ARS#275/ARCI#9397 grid CM88ok
mailto:we6w@qsl.net http://www.qsl.net/we6w

Date: Tue, 5 Aug 1997 12:40:49 -0700 (MST)
From: Joe Gervais <vole@primenet.com>

To: qrp-l@Lehigh.EDU
Cc: azqrp@dancris.com
Subject: [24366] Aug. ScQRPion Meeting Notes
Message-ID: <199708051940.MAA20774@usr05.primenet.com>

Howdy Folks,

The August ScQRPion Get-Together has come and gone. Another great meeting with the gang! Raffles were held (a Kanga keyer and other goodies donated by fellow ScQRPions) to raise a little club moolah, and John brought a box of HB "third hands" (as shown by KI6DS up at Tuthill), sold for a buck each for the club kitty too. Also Bob and Bertie Hightower passed out free ScQRPion hats to the crowd so we can find each other at hamfests now. :-) Thanks to all of you!

Lots of the usual stuff. Talked about the Ft. Tuthill 'fest (definite keeper!), shared Bumblebee tales, talked about how to get to Pacificon in Oct, and began subversive strategizing for the upcoming Fox Hunt.

Final planning is also occurring for a new ScQRPion-sponsored contest. Hint: Think big and sweaty. :)

A few rigs were on hand for the curious, and Scott (K7ZEN - cool call!) and his wife Mary Jane dropped by after having met us up at Tuthill the week prior. Nice folks. One of these days we'll have to have a "field meeting" down in Tucson so we can see more of our Southern AZ ScQRPions.

That's about it! As always, a nice relaxed time. Anyone's free to drop on in, first Saturday of each month, 10:30am at Luby's across from HRO (Phoenix). Hope to see ya there.

The List of Critters: (Hope I got everyone)

John (KJ7YN)	Russ (AB7JX)	Jerry (W5JH)
Mike (W9UQB)	Mike (NQ7K)	Kent (AB7OA)
Brian (W5VBO)	Scott (K7ZEN)	Mary Jane (Call pending :-))
Bob (KI7MN)	Bertie (N7XJW)	Dan (N7VE)
Mike (NP2J)	Bert (W2GOB)	Joe (AB7TT)
Floyd (NQ7X)	Gary (AB7MY) and family	

Cheers de AB7TT,

-Joe, vole@primenet.com, AZ ScQRPions (Phoenix)

"Veni Vertical Vamos - I came, I radiated, I left". -AB7TT

Date: Tue, 05 Aug 1997 15:45:35 -0400
From: Zack Lau <zlau@arrl.org>
To: qrp-l@Lehigh.EDU
Subject: [24367] Re: Broadband Amp
Message-ID: <33E782DF.2D4@arrl.org>
Mime-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Bob Kellogg wrote:

> To paraphrase Thomas R. Marshall, "What this country needs is a good 5 watt
> broadband amp."

I published a 1.8 to 54 MHz design in the May 1992 QEX. 28 to 30 dB
of gain on all the amateur bands in the range--is that broadband
enough? 1.8 to microwave might be possible, but the devices are
still very expensive--and probably fragile as well.

It does need a 28 volt supply and draws 14 watts of power just
idling--so its not meant for backpacking rigs. It is quite linear,
with IMD 38 dB down relative to PEP, worst case.

--Zack Lau W1VT

Date: Tue, 05 Aug 1997 15:40:15 -0400 (EDT)
From: n4js@amsat.org
To: qrp-l@Lehigh.EDU
Subject: [24368] Found it! (The thump)
Message-ID: <XFMail.970805154333.n4js@amsat.org>
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 8bit
MIME-Version: 1.0

I was almost feeling guilty because my 38S was "thumpless." After reading some
of the comments, I tried to figure out why. Some seemed to think the thumps was
caused by ground loops, etc. The only thing "unusual" in my 38S is that it is
mounted in the Custom Enclosure, and my 7808 is heatsinked (bolted) to the
case. I took out the bolt and tried it. VOILA' Thump! LOUD thump! I bolted it

back, and everything is fine again.

So, I found the secret of no thump in MY 38Spl. As they say...your mileage may vary...

Sent at 15:43:33 on 05-Aug-97

```
 _  _  _ _      _  ___   John L. Sielke n4js@amsat.org n4js@pobox.com
| \| || | |  _ | |/ __|  n4js@qsl.net   NJ Grid:FM29LN
| .` ||_  _|| || |\__ \       http://www.qsl.net/n4js  NJ-QRP #57 QRP-L #884
|_|\_|  |_|  \__/ |___/   QRP-ARCI #9328 CQC #443 CQrp #50
NE-QRP #507 G-QRP #9544  NorCal #1989 QCWA  FISTS #2781 ARS #243
WIMPS Qs=032 30m=29 17m=3 12m=0 States=09/02/00 Countries=16/02/00
```

Date: Tue, 5 Aug 1997 13:01:38 -0700 (PDT)
From: Dana Myers K6JQ <myers@bigboy.West.Sun.COM>
To: n4js@amsat.org
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [24369] Re: Found it! (The thump)
Message-ID: <Roam.SIMC.2.0.6.870811298.4750.myers@bigboy>
Content-Type: text

John, N4JS, wrote:

> I was almost feeling guilty because my 38S was "thumpless." After reading
> some of the comments, I tried to figure out why. Some seemed to think the
> thumps was caused by ground loops, etc. The only thing "unusual" in my 38S
> is that it is mounted in the Custom Enclosure, and my 7808 is heatsinked
> (bolted) to the case. I took out the bolt and tried it. VOILA' Thump! LOUD
> thump! I bolted it back, and everything is fine again.

Hmmm - simply bolting the 7808 down sounds like it is improving the ground pin connection. Combined with the reports of thump reduction by increasing the bypass capacitors, it sounds like the thump is simply instability in the 7808, on the input side. Has anyone tried putting a 100uF tantalum on both the input and output pins, perhaps paralleled with a .1 monolithic?

Dana K6JQ
Dana@Source.Net

Date: Tue, 5 Aug 1997 16:16:02 -0400

From: "David Maliniak" <dmaliniak@penton.com>
To: qrp-l@Lehigh.EDU
Subject: [24370] Re: Found it! (The thump)
Message-ID: <852564EA.006F1788.00@mail.penton.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII

Maybe I'm missing something here, which isn't unlikely, but...

Isn't the 78L08 that was supplied with the 38 Special in a plastic package? If that's the case, how would bolting it to the enclosure affect its ground?

72 David N2SMH
Glen Rock, NJ

Date: Tue, 5 Aug 1997 16:15:34 -0400
From: rerobins@unccvm.uncc.edu (Rick Robinson)
To: qrp-l@Lehigh.EDU
Cc: MNHopkins@aol.com
Subject: [24371] In defense of 10-X
Message-ID: <v02130501b00cb3d045f6@[152.15.144.13]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

I've been a 10-X member since 1972, and a ham since 1963. I got my 10 numbers via a mix of CW and SSB QSOs and at the time all QRP by the old "less than 100 watts" standard. I got my first Argonaut in 1973 and the first QSO I made with it was a KZ5 on 10 meter SSB. We exchanged 10-X numbers. I still operate 10M QRP with my Argosy on SSB and HW-9 and Sierra on CW so I must throw in my $.02 worth.

10-X dates from 1961 and came about after the loss of the 11 meter band. There was a lot of discussion at the time regarding the possible loss of 10 meters to the business segment. It was a case of "use it or lose it" and thankfully 10-X has put a lot of activity on a band that could very easily have been taken altogether or eaten away like 220MHz.

MNHopkins@aol.com, Mike Hopkins, AB5L, writes:
>When I asked them to endorse my certificate for all AM phone, they refused.

10-X has only offered CW and Phone endorsements with Phone covering both AM

and SSB. Why should any organization of 70000 members, 10000+ back in the 70s, make an exception for one individual? 10-X is a volunteer organization trying to keep paperwork to a minimum and is quite a bit larger than the Arizona Cactus Patch. What if QRP ARCIs 8000+ members all wanted special treatment? Why you'd have chaos, anarchy, badgers running amuck, folks on the Group W bench raisin' all kinds of ....

Again Mike, AB5L, writes:

>while 10-10 was, and is, a bunch of SSB types entoumbed with commercial
>equipment.

Whoa! These types of generalizations regarding 10-X are untrue and if AB5L would research 10-X, he would know there are 10-X cw contests, cw nets and lots of 10-X cw ops. I have given my 10-X number to all of my 10 meter CW contacts since 1972 and have received many in return both from US and DX stations. Also, putting others down regarding the nature of their gear is not the way to make friends via ham radio or a mailing list. There are members of this list with limitations both physical and time-wise that prohibit their building their own gear. Does that make them any less a ham?

Roger Hightower, N7KT, makes a good point:

"This was the weekend of the Summer Ten-Ten SSB Contest. What you thought may have been the start of a QSO was a contest exchange for them...they weren't dumping on you, just moving on to more contacts."

Try ragchewing with any contester during a contest. I'll bet Mike wouldn't want to chew the fat if he was operating a contest. I hope any ham worth the paper his ticket is written on can tell from listening to a band for 5 minutes whether there is a contest in progress and if a station calling CQ is participating.

Lighten up folks. Granted there are bad apples in 10-X as there are throughout ham radio, but if not for the activity generated by 10-X, we may not have 10 meters today.

72,

Rick kf4ar
qrp-l # 402   qrp arci# 5552 10-X# 11068 WPE4FYX

Date: Tue, 05 Aug 1997 13:44:39 -0700
From: Ken Lopez <kjlopez@earthlink.net>
To: wa5whn@juno.com
Cc: QRP-l <QRP-l@Lehigh.EDU>
Subject: [24372] Re: QRP AField, Sept. 20th
Message-ID: <33E790B8.7B63@earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi Jay,

Just thought I would repeat that it was good to meet you at Flag. Great event. I was pretty tied up with my kids, and also had my parents along who are in their 80's and so did not have a lot of time for all of the presentations. The ones I did see, Duffy, Cecil, Chuck, and Paul, were great. Hats off to the Scorpions! Well done.

Cheers, and 73, er 72,

Ken, N6TZV

PS Did you ever let Doug in on the price of the PM2? This could go on for years...

Date: Tue, 05 Aug 1997 15:42:32 -0500
From: AA0QX <AA0QX@prodigy.net>
To: qrp-l@Lehigh.EDU
Cc: mlp@flash.net
Subject: [24373] Re: SWR Analyzer
Message-ID: <33E79038.105F@prodigy.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Marty wrote:
>
> I've been thinking about getting an MFJ SWR Analyzer (#259) to use in
> checking out various antennas for HF bands.
>
> Does anyone have experience with this unit they'd like to share?
>
> Any competition I should consider before making a purchase?
>
> Thanks,

>
> Marty Porter, N5SXV

Mine has been a tremendous help. When cutting an antenna, you can tell how low you are going to be able to get the SWR. For instance, if the SWR is 1.5 to one at 6.9 MHz, and that's as low as it goes, you won't cut it too short as you trim the antenna.

One thing to remember is that the batteries need to be fully charged, especially for the frequency counter to work correctly.

72 de Austin

Date: Tue, 5 Aug 1997 18:17:08 -0400 (EDT)
From: NilsBull@aol.com
To: QRP-L@Lehigh.EDU
Subject: [24374] Vacation Radio & the Smithsonian tour
Message-ID: <970805181507_-1238452801@emout14.mail.aol.com>

Gang,

I am here to tell you: hotel radio bites. I tried every night to hear past the light dimmers & street lights & arcing insulators on 30m. Sometimes I heard a signal or two, sometimes nada. The set up was, for those unfamiliar with this rant, a S&S Engineering ARK30 (what does about 7 watts out on 13.8 v), the Rainbow Bridge/Tuner (modified for low-Z and the standard 1/2 wavelength antoona), some wire for antennas, grounds &c, a good battery/ps/pv set up & some other doodads.

In Washington we stayed at a Comfort Inn/Quality Courts place on Courthouse Dr (or street or whatever), near the metro and close to some really eclectic eating joints. Room on the second floor of the cheaper section. I stretched the wire around the room, grounded to the commode pipes & tuned around. Me need a "Buzz-not"? You betcha. The room had a big I-beam going through the middle of it and aluminum frame windows that were part of the airconditioning box too. Very faraday cage. I also managed to tune the window frame against the commode pipes & heard nothing better 'n what I'd got before. No luck. No qso. Nada.

In Virginia Beach we stayed at a Comfort Inn on Pacific Ave (or street or whatever) and had a room on the 3rd floor. Non-smoking floor. Very nice. I hung the 1/2 wl around the room and tuned against the window frame. Heard them buzzin' street lights at night & dimmers (or arcing insulators) during the day. Sounded like there was no one else on the air 'cept fer them buzzin's. Or maybe it was buzzards. Anyway, no luck their either.

In both cases I got the same results on the Sony ICF7600D, which I'd brought along in case I found a good salsa station or whatever. I heard the same crap on 30 with the Sony as with the ARK30 so I figure it was not my radio, the antenna or whatever. Simply a bad set of QTHs to run out of.

I was tempted to go down to the beach after dark, string the 1/2 wl between a couple empty lifeguard perches & see what happened. But there was still folks out on the beach (and some really stupid damn idiots out in the surf) long after sun-down, like around 11 p.m. I took the ICF7600D down to the beach and could hear lots of folks on 40. On 30 it was pretty, well, dead.

And did I mention the QRN? Seemed to be a lot of that too. Wonder if I was hearing what everyone else reported on here while I was gone.

So, plans for the next time:

> > 1. Run the radio in the car, even if I look silly as hell out in the parking lot at 3 p.m. in the heat of the day. Running from the car gives me the option of using a mobile vertical antenna and a mobile QTH that I can use to escape the QRN.

> > 2. Take both 40m & 30m radios. I noticed on the Sony that there was actividad on 40 when 30 was munged. And a lot more of it too. (Of course, this brings up the immutable question: Why not take the Argosy? That way I'd have almost all bands and SSB options too. Well, it's a nice idea, but Cindy didn't want to use my car [which is already wired for radio] and she didn't want me to take the time to wire her car for radio, even though we were taking it [instead of mine]. Salient point. Open for future consideration.)

> > 3. Give up on the traveling radio box of dumbhood idea. Too big, too heavy & too hard to lug around. A revised version of the box of dumbhead is in the works. Smaller, lighter & more ergonomic. And without the solar charger built in. That one can go in its own box, cable, controller and all, thus allowing me to use the PV if I want to but not having to lug it around &c.

> > 4. Bring more salsa tapes. I kinda got tired of Olga Tan~on & El Gran Combo de Puerto Rico about the middle of the Pennsylvania Tpike, which was on the AAA trip-ticket deal and we needed the toll charges anyway, right. (Did have a nice conversation at VBch with a woman from Bolivia who couldn't understand why gringos think that Spanish is some kind of Third World language or something . . . but that's another story.)

As radio goes, the trip was a flop. Except for the salsa station that I tuned to in Washington. Hip place. Ran into a family from Norway, vacationing & checking out the sites & sights. Almost everyone in the hotel custodial staff was latino or oriental. One of the waiters in the restaurant was from

west Africa someplace. Diversity &c.

But I did hear the QRN. That I did hear. And checked out the early radio stuff at the Smithsonian. Interesting discovery: Morse based some of his early code system on printing: leads & slugs, raised type, composing stick to put the letter bars together. Like he had the idea for a mechanical system of sending messages, with no sense of the digital nature (a la Jaccard loom) of the transmission method. Only later did others take the transmission method (and medium) into consideration and free the operator from the tape-and-pencil printer/pieces of metal as pre-transmission encoder system. >From hand-set type to digital type in, what, 150 years?

And there was a TR7 on display at the Smithsonian's "ham shack." Bet it has my finger prints on the innards somewhere. Leavin' a piece of yerself behind kind of thing.

So that's the trip report. If anyone heard me callin' CQ but was unable to get back to me through the QRN, I'd like to know. Then I can get me ears checked for badger infestations.

73
Nils
WB8IJN &c
 . . . anyone seen the "Powers of 10" replay at the end of "Men in Black" yet? And thanks, Paul, for explainin' the Jansky's thing . . . I was tempted to look in the encyclopedia but got sidetracked by vacation . . . now I understand why the satcom stuff I worked on in the late 70s (USNR) was calibrated & tracked by temperature K. Hmmm . . . . now if I could only explain that herd of burning cows. . . . . .

Date: Tue, 5 Aug 1997 18:27:05 -0400
From: "G.R. Widmayer" <grwidma@edcen.ehhs.cmich.edu>
To: qrpdave@ocsnet.net
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [24375] Re: 10-10 club?
Message-ID: <FFFFFFFF.3F130D42@edcen.ehhs.cmich.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Dave, don't be too hard on the 10-10'er. The band has been dead for a number of months and when it comes alive many hams want to collect numbers......10-10 numbers.

Don't think that because you didn't have the number, the qso was over

because of it. Most if not all 10-10'er who are active in the numbers game are going to get a number, name, and state and off they go to the next qso. Some guys hunt the numbers and also like to talk a bit, but many are hungery while the sun spot are getting higher to work the guys with the 10-10 numbers. Hope this helps as 10-10 was in part formed to increase action on 10 meters not reduce it.

Gary/N8AYY
Ten-Ten #32891

Date: Tue, 5 Aug 97 18:21:10 UT
From: "chuck munce" <k0gjx@msn.com>
To: "mnqrp" <mnqrp@qsl.net>, "qrp-l" <qrp-l@Lehigh.EDU>
Subject: [24376] altoids found
Message-ID: <UPMAIL05.19970805204709016 2@msn.com>

hi everyone
i have been looking for altoids ever since i read the thread about them. finally found in brooklyn park mn at mills fleet farm stores.wow are they strong!! the boxes are neat however. now i have to build a rig into it, does anyone have a c/b for pixi or similar tiny qrp rig?? thanks and 73 chuck k0gjx

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Date: Tue, 5 Aug 1997 12:16:12 -0600
From: Brad Mugleston <bmug@gwl.com>
To: "'DYARNES@aol.com'" <DYARNES@aol.com>, "'kaul@netcom.com'" <kaul@netcom.com>
Cc: "'qrp-l@lehigh.edu'" <qrp-l@Lehigh.EDU>
Subject: [24377] Denver
Message-ID: <01BCA199.5E9013A0@pps-pc10.gwl.com>
Content-Type: text

David and Alan,

Hope your stay in Denver was nice, next time try to give a little more warning and maybe we can show you around. I get the QRP-L in digest form and didn't see your posts until late Monday night.

The Colorado QRP Club meets every Monday night at 8:00PM on 147.225 (+600)(I think its +) and the first Saturday of each odd month (January, March, May...) near the Tech Center. There are a number of us that work in the Tech Center and some even get away at lunch and meet in a parking lot on a hill and work the air.

Hope to see you next time, or any one else. I got to do an eye ball with Niel Skousen one of last years N/T foxes, so it does happen.

De KB0ROL, Brad

End of QRP-L Digest 809
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